

HOUSEHOLD MANAGEMENT

HOUSEHOLD MANAGEMENT

A Handbook of Domestic Economy and Hygiene

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PREFACE

BELIEVE this book on Household Management will meet a long-felt want, viz., exhaustive and practical information in all that concerns the house and its contents, as well as very useful rules for the arrangement of the work for each department, and how to clean and care for everything we require for our daily use; also valuable information about Lease Agreements and various other legal difficulties.

The system of drainage is carefully dealt with, and how, to ensure that our houses are kept

clean and wholesome.

When two teachers who have had many years of constant teaching of these important household duties combine to write a book on their work, we are justified in expecting something

very good and very useful.

If, before a house is built, the architects and builders would consult a sensible teacher of Domestic Subjects, we should no longer find the kitchen placed on the warmest side of the house, the larder facing due south or west, or close to a lavatory, and the cisterns where it is almost impossible to get at them, and where they are most likely to freeze during a hard winter. Good sensible cupboards in a new house would not be overlooked, if a practical woman had a

say in the equipment of houses suitable for small families; and bathrooms would not be found at the top of the house, as is often now the case, especially in houses that have been, as the agents express it, modernized.

This book should meet with a hearty welcome from students training to be teachers of Domestic Subjects, and from many a mistress, distracted by ignorant servants, whose own knowledge is not sufficient to teach others the right way to carry out the duties entrusted to them.

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CHAPTER I

THE CHOICE OF A HOUSE

HOUSE-HUTTING! How often does this word convey useless viewing of impossible properties, endless visits to agent after agent, and needless expense? How frequently does that which, if not an exhilarating, should at least be a pleasant occupation, become a thoroughly wearisome task, owing to the householder's ignorance of what is desirable in a residence, and his inability to decide what is best suited to the requirements of the family for whom the house is sought?

The locality, is, of course, usually decided by the circumstances, and when in or near a town, it is well to see that the home is conveniently placed as regards conveyances to the occupants' places of business, schools, churches and principal shopping quarter. In the country, long distances from the railway should be avoided, unless the residents are in the fortunate position of being independent of hired vehicles. It is also well to note that the water supply and drainage of the district are beyond reproach, and that the district is not too highly rated.

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The question of rent would appear to be one of the first considerations when house-hunting, and time as well as money will be saved, if, prior to communicating with the Estate Agent, the amount to be expended for this purpose be decided upon. Usually not more than one-eighth of the total income should be set aside for the rent, but it not infrequently happens that in ccertain localities it is found necessary to devote a larger proportion, and where this is the case it is advisable to ascertain that the other ordinary household expenses can be adjusted accordingly.

SOIL. Effective sanitation and the health of the family being partly dependent on the soil of the site of a house, it is important that it be built on a dry soil, such as gravel, sand or sandstone, which, being permeable, allow the water to soak through. Considerable depth of this top soil should be present above the impervious subsoil, or the house will become water-logged from the nearness of the ground water. Clay is undesirable either as a surface or a sub-soil, since water accumulates readily upon it, a fault which, however, can be overcome by a good system of drainage. Sore throat, consumption, and rheumatism are frequently the results of living upon impermeable soils which are badly drained. "Made" soils, being formed chiefly of ash bin refuse, are rendered impure and dangerous by the decomposition of organic matter in the soil, and before being employed for building, should

be exposed to the action of rain, frost, and sunlight for at least three years. The constituents of soil are:

(a) Animal and vegetable matter in variable quantities.

(b) Mineral matter in large quantities."

(c) Ground air; i.e., the air in the interstices of the soil, which contains much carbonic acid gas.

(d) Water (moisture and ground or sub-soil

water).

ASPECT. Light and air being two essentials of healthy life, the house should be so built as to admit the sunlight into all the rooms. In localities, particularly in towns, where the position of the houses is determined by the direction of the roads, it is impossible to have them so placed, but a south or south-west aspect is usually the best for the more important rooms. An easterly aspect is cold and draughty, as also is a north or north-easterly, the latter being damp and cheerless, so that neither is to be recommended for the aged and invalids. A westerly aspect is warm, but open to the wind and rain.

ENVIRONMENT. If possible, the house should be chosen which is situated near a large open space, and a garden will be found to be an asset both as regards interest and utility. Proximity to marshy land or stagnant pools, noisy and unwholesome trade premises, grave-yards, etc.,

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should be avoided, as also should narrow streets admitting but little air and light. A position on high ground is good, though the house should not be too much exposed to the elements. Trees are healthy neighbours, since they give off a supply of the necessary oxygen, and absorb superfluous moisture. Care should be taken, however, to ensure that their number is not too great, and that they are not so near the premises as to exclude light and air, thereby causing damp, which is so injurious alike to make and property.

CONSTRUCTION. It is unnecessary here to enter upon a description of the various styles of architecture to be met with in town and country, but it is well to bear in mind the advantage of choosing a home which is pleasing to the eye, as well as practical and convenient in construction, so as to allow sufficient space for the comfort of the family and for the safe keeping of their possessions. The foundations and cellars of a house are perhaps the most important items in its construction, for upon them depend the dryness and stability of the walls and roof. A foundation of concrete (ground brick and stone embedded in cement), which is firm and impervious to moisture and of sufficient depth and width to support the weight and height of the building, is required. The London County Council insist upon a concrete foundation eighteen inches deep, extending two feet beyond all walls, thus preventing damp and ground air from rising into the basement.

As building bricks are porous and capable of absorbing water to the amount of about one pint for each brick, and as they also possess the property of conducting moisture from one to another, the walls should be supplied with a damp-proof course, placed just above the level of the ground and four inches below the level of the first flooring. This damp-proof course may be composed of;

(a) Slates embedded in cement.

(b) Pitch.

(c) Asphalt.

(d) Slates embedded in asphalt.

(e) Staffordshire blue bricks, which in course of manufacture are heated to so high a degree that the ferric oxide becomes black oxide, rendering them very hard and less porous than ordinary bricks.

Where the house is built with a cellar and the walls are in contact with the soil above the dampproof course, another similar course must be laid above the ground, with a vertical course between the two. (See Diagram 1.)

The floor and walls of the cellar should also be of waterproof concrete. In some cases a double wall to the cellar is adopted, but this method adds considerably to the cost of the building. Damp walls may be avoided further by an Open Area, the soil removed from around the house forming a trench. (See Diagram 2.)

Many buildings are constructed with double walls, and an air space between the inner and outer walls, which are connected by iron ties,

the outer walls being thicker than the inner, This plan adds to the warmth of the house as well as to its dryness. Much exposed walls are frequently protected from beating rain by a covering of slates, Portland cement or mortar with stones embedded in it. (See Diagram 3.)

Parapets, gables and window-sills, besides being ornamental, are useful in directing moisture from the house, and should project well

beyond the walls.

The roof, being the main protection against, wet, heat and cold, should be sound and of good materials. Slates or tiles well laid, and interlined with a non-conducting felt, are largely employed in roof-making, and are perhaps the most satisfactory materials. The roof should be well sloped but not so much as to interfere unduly with the cubic content of the upper rooms.

Rain-water pipes and gutters should be noted and kept in repair, for if neglected, they cause an overflow and damp walls are the result. Chimneys should be inspected and restored where signs of smoking occur. Inside the house, the floors will naturally have the first consideration. Notice that they are of good material, such as oak, pitch pine, or pine, also that they are well seasoned and evenly and closely laid. Ascertain that they are so constructed as to guard the occupants against draughts and noise, from above or below.

Windows and doors should be fitted with bolts and locks of such a nature as will keep the house secure. It is advisable to avoid a house

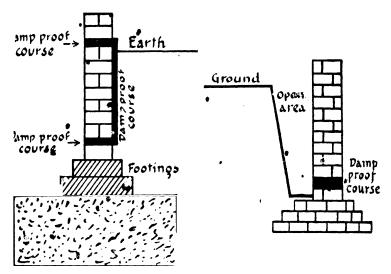


DIAGRAM I.

DIAGRAM 2.

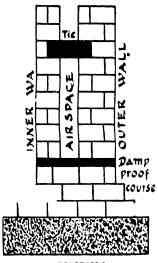


DIAGRAM 3.

CONSTRUCTION OF DAMP PROOF COURSE.

where the rooms lead from one to another. The utility and cheerfulness of a room are greatly enhanced if the wall space is not cut up by too many windows, doors, fireplaces and so forth, leaving insufficient width for the larger pieces of furniture.

As many rooms as are compatible with the family requirements and the family purse should be allowed. Separate bedrooms are the healthiest, and even if small, can be adequately ventilated, and each should possess a fireplace.

Notice the inner walls, and where signs of damp are present, have the fault rectified if

possible.

A careful look-out for signs of house pests such as mice, rats, beetles, etc., should be observed, and dark passages, awkward stairs, and corners difficult of cleaning should be avoided. Sufficient lavatory accommodation is highly important, and hot and cold water supply should be found on the upper floors. Take note that the bathroom is located so as to be accessible to all, and that it is light and well ventilated.

The kitchen must be placed in convenient relation to the dining-room and pantry, in order to minimize labour in serving the meals. It should be a comfortable light room, well aired, and cool in summer time. Preferably a door should shut off the kitchen and domestic offices from the rest of the house. The supply of cupboards and storerooms can hardly be too great.

A wide, well-lit entrance hall is both pleasant

and useful, and adds much to the dignity of the house.

The sitting-room in constant use should be large, light, and have a cheerful outlook; in the case of the morning-room, care should be taken that it gets the morning sun. It is essential that the bedrooms and nurseries be light and airy, not too near the lavatories, and out of the way of any smell which might escape from the kitcheus.

The stairs should be so constructed as to allow of trunks and furniture being easily carried up or down. The treads should not be too steep, and sufficiently wide to render them easy and safe for the use of children and elderly people; good strong balusters supporting the hand-rail should be provided, and there should be no dangerous, awkward turns. Do not overlook the comfort of the servants, but see that their rooms are well appointed, light and pleasant.

An outside larder is to be appreciated, but note its position in relation to lavatories or drains. Accommodation for the storage of a considerable quantity of coal in a convenient place is also an advantage.

Entrances and exits should be so arranged as to obviate the necessity of fixing draught-protectors to the doors, and an efficient means of escape in case of fire should be provided.

FLATS. It has often been argued that to the ever increasing habit of residing in hotels and flats, must be attributed the decline in the home-

life of the country, but in spite of this and other disadvantages, much can be said in its favour.

To the small family, particularly in towns, the convenience of flat-life is invaluable. As the rooms are fewer and all on one level, and as there are no stairs to furnish and keep clean, labour is far less than that in a house of the same rental, and consequently fewer servants are needed. The rooms, for the most part, are compactly placed in relation to each other, and the untodate heating, water and sanitary arrangements, which are generally to be found in flats, reduce the work of the maids to a minimum.

Greater security when absent from home, as it can be left in the porter's charge, and the fact that rates and taxes are usually included in the amount of rent chargeable, are other inducements which lead the householder to become the tenant of a flat.

To many flats suitable restaurants are attached, or meals can be supplied under a cooperative housekeeping system; service is frequently provided in a similar manner, while in the cheaper tenements or workmen's flats public wash-houses are at the disposal of tenants for a very small sum.

The mind naturally turns from advantages to disadvantages, and under this head it may be urged that in the majority of flats the rooms are more cramped and less airy than is the case with houses, that the accommodation for servants is poor, and that cellars, cupboards, and store-rooms are small and few in number. Again, isolation

being impossible, the question of noise created by other tenants has to be considered. There is seldom a garden of any description, and domestic pets may be prohibited. Where no passenger lift is installed, the stairs to the upper flats may be found trying, and the provision for the disposal of refuse is often a source of trouble.

The flat-hunter will do well to observe most of the points already mentioned in connexion with choosing a house, but others peculiar to

fiats should not be overlooked.

Inquire if the rates are included in the rent, and also if the flat is let by the actual landlord, or if it is a "sub-let," in which latter case it is advisable to make sure that the tenancy is quite in order.

Take note of the cupboards, and be certain that there is an airy larder not in the vicinity of

lavatory or drains.

Some information regarding near neighbours, above, below and on the same landing, prior to taking up residence in a flat, will frequently be found advantageous, while convenient arrangements for the delivery of tradesmen's goods, coal and other necessaries, together with the position of dustbins or rubbish-shoots are matters for careful consideration.

Finally, read carefully the contents of any agreement, in respect to a tenancy of any kind, before signing such document, and be sure that every clause is understood, and that no undue restrictions, or unfair conditions, be inserted therein.

CHAPTER II

WATER-SUPPLY; DRAINAGE; DISPOSAL OF REFUSE

HOW valuable and indispensable to every form of life is water, and how little approciated is it among the inhabitants of countries where its supply is practically unlimited. The health and vigour of the race depending, as it does, so largely upon the purity of this element, surely no sacrifice should be deemed too severe, and no effort too great, to secure for every town, village and community an abundant, constant supply of pure sparkling water for drinking, cooking and other domestic purposes, the average daily amount required by each individual being from twenty-five to thirty gallons. It is a colourless, transparent fluid, composed of two gases, hydrogen and oxygen, and should be tasteless even when subjected to heat.

SOURCES OF SUPPLY. In many localities, particularly in country places, the residents are to a great extent dependent upon the most natural or rain-water supply, and where this is the case,

care should be taken to guard the water against contamination by the pipes and receptacles used for its collection and storage. The pipes should be kept thoroughly clean and free from obstruction, and the storing barrels or cisterns should be well closed in at the tops and cleaned periodically. Leaden pipes as a means of conveyance should be avoided, since rain-water, lacking mineral matter, becomes charged withthis metal when passing through it and is then highly injuridus. It is insipid to the taste, and is unfit for drinking purposes unless filtered or boiled, but for laundry, and other domestic purposes it is particularly useful, having no degree of hardness, and requiring very little soap to form a lather. Its cleaning powers, too, are more effectual than those of hard water, and "furr" does not accumulate upon the vessels in which it is heated.

When collecting rain-water, it is advisable to reject the first portion that falls, since this contains impurities. A Separator may be used for the purpose; this instrument is made of zinc upon an iron frame, the central part or canter being on a pivot. The first part of the rainfall is directed into the lower waste pipe, carrying with it the dirty substances from the roof, etc., which it has washed away; after a certain quantity of water has passed through the separator, it automatically cants over and turns the clean water into the storage tank.

In a district where several springs are to be found, there is little fear that the water supply

will give out, providing they are of sufficient depth and force to warrant the cost of sinking wells.

Spring-water is rain-water which has passed through the earth until it has reached an impervious soil where it collects in an underground reservoir, whence it is forced again to the surface by the pressure of the surrounding earth; it is usually pure and pleasant for drinking purposes, having become aerated in its passage through the earth from its natural "underground reservoir."

The water from the surface or shallow wells should be used with caution, since it is likely to be loaded with impurities drained into it by the ground water of the surrounding soil. It should not be used for drinking if the well is in the near vicinity of house cesspool, pigsties, farmyards, stables or privies. If it is the only means of obtaining water, the well should be situated on high ground, and placed at a good distance from the house.

Deep wells are made by digging an ordinary surface well sufficiently deep to reach the source of supply. These, from forty to fifty feet in depth, should be built with strong walls of brick and cement, to prevent the percolation of the ground water into them, and perhaps the best method of drawing the supply from them is by means of pumps, which, if fixed within doors, will be found more convenient for use, and less liable to be affected by frost in winter. Deep well water is free from organic impurities,

and is usually hard, having disposed of quantities of calcareous, magnesium and alkaline salts during its passage underground.

All wells should be covered in at the top, as a further precaution against contamination.

Other natural water supplies are those obtained from rivers and lakes. The latter is usually soft and pure, and of good quality, but the former should not be used for drinking unless properly filtered; the presence of suspended matter, such as decaying organic matter from vegetables and animals, can generally be detected, while sewage, discharges from factories, sundry refuse from towns and villages situated further up on its banks, may pass directly into the river.

In large towns and in all localities where the population is sufficiently numerous to justify the expense incurred, waterworks are constructed to provide an adequate supply of water for private houses as well as for public buildings. Reservoirs, filtering beds, mains, and service pipes are laid down, together with efficient means of conveyance from the river or other source from which the water is procured, often at a great distance. It will be readily understood that in order to preserve the public health and comfort, co-operation on the part of all members of the community to establish and maintain the best possible system for securing, storing, and delivering the water upon which they depend, is of the utmost importance.

Cast iron piping with a protective coating

inside is used for the main pipes. This type is also the best for house pipes, though lead, which is pliable and easy to manipulate, is frequently employed.

There are two systems of supply (a) the con-

stant, and (b) the intermittent.

The advantages of the constant system will be seen, when it is noted that the water enters directly from the main into the house; it is aerated and cooler than if stored in a cistern, less liable to contamination by ground air and noxious gases, and in case of fire a sufficient

quantity is available.

The intermittent system necessitates tanks and cisterns for storing purposes, of which those manufactured of galvanized iron, zinc, iron coated with cement or enamel, and slate set in Portland cement are some of the most serviceable. Lead cisterns are not desirable since. lead poisoning may result if the water be soft. Reasons urged against the adoption of this system are many and various, but the inadequate supply in case of fire, the difficulty and trouble incurred in keeping the cisterns clean and all their pipes, ball-taps, and over-flow apparatus in good order, may perhaps be mentioned as the more obvious. Lavatories should always be supplied with a separate flushing cistern. Cisterns should be easily accessible for cleaning purposes, also well ventilated to keep the adjacent air pure; they should be fitted with lids to prevent the ingress of dust or any deleterious objects. All cisterns should be fitted with

a ball-tap and an overflow pipe; the ball-tap prevents any further flow when the cistern is full, and it does not act properly the overflow pipe carries off the excess of water. This pipe should not discharge into the soil pipe but directly into the air.

TO CLEAN A CISTERN. Having removed the lid, tie up the ball-tap to stop the running of the water; stir up the sediment and contents, after which empty the cistern by turning on the sink tap; plug the supply pipe in the cistern, and thoroughly scour the inside with hot water and soda; run off the dirty water, release the ball-tap and the cistern will re-fill. Clean water should be allowed to run through the cistern for a few minutes to remove any particles of soap or sediment left behind after cleansing. N.B.—Do not use the bath tap as the dirty water will stain the bath.

PIPES IN SEVERE FROST. If the house is to be left unoccupied, cut off the water supply at the main, and turn on every tap in the house to allow the pipes to empty, then shut them off again. For an inhabited house, it is advisable to keep a gas jet or lamp lighted near the pipes which are situated in a cold cellar; pipes outside the house should be protected with straw and old rags. Every night a small quantity of salt dissolved in warm water should be put into the traps of water-closets, etc.

IMPURITIES IN WATER. Before water is in a fit condition for drinking it is essential that the impurities collected at its source, in transit, dwing, storage, or in distribution, be removed. Filtration is carried out on a large scale by the water companies; the water, after being passed into settling reservoirs, is allowed to flow on to the filter bed, which is composed of two feet of sand, and two feet of gravel, of varying sizes from a pea to a walnut. The water passes through at the rate of four inches per hour, and at intervals, in order that the beds may be exposed to the oxygen of the air when not in use. The result of filtration is that some of the organic matter in the water becomes oxidized, and some is mechanically stopped by the filtering medium.

Of domestic filters there are many, but it must be borne in mind that the perfect filter should be so constructed as to allow of all parts being easily removed for cleaning, and should not contain any material capable of imparting injurious qualities to the water. The object of a filter is to remove mechanically suspended matter and organic impurities, for which purpose various mediums are employed. Spongy iron, filtering partly by oxidation and partly by mechanical action, reduces the hardness of the water and removes organic matter. Silicated carbon (75 per cent. charcoal and 22 per cent. silica) removes, in addition to organic matter, any lead which may be present. Animal charcoal is not to be recommended, since it promotes the growth of bacteria, possibly from the large

amount of phosphates contained in it. Carbolite and polarite are also filtering mediums. The Berkefeld filter and the Pasteur-Chamberland filter, similar in construction and readily cleansed, may be regarded as two of the most popular. In the Berkefeld, hollow cylinders of various sizes composed of silicious diatomaceous earth termed kieselguhe (fossilized skeletons of diatomo) and highly porous, form an excellent medium. These cylinders are closed at one end and the other end is fitted with a metal mount, and enclosed in another vessel, having a space between the two. The water passes through the walls from the outside to the inside feaving all impurities on the external surface, then out through a small aperture in the mount.

When cleaning the filter, carefully remove the cylinder from its casing, brush with a clean brush or piece of loofah under a tap of running water, using no soap; place the cylinder in a pan with sufficient cold water to cover it; gradually heat this and boil for one hour; allow it to cool before removing and rinsing, then replace with the other parts of the filter which have been thoroughly washed and dried. A new cylinder imparts an earthy flavour to the water, and it is therefore advisable to waste the first few pints of water purified with its assistance.

Boiling impure water renders it fit for drinking but flat and insipid to the taste. Purifying water by distillation is unsuitable for domestic purposes, though it is useful on board ship.

To test water, note if it is clear; held in a

strong light against a black object, in a clean glass, suspended matter will be at once revealed. Observe the smell and colour; no smell should be traceable in pure water even when warmed, and it is colourless, unless seen in bulk, when it takes a bluish tinge, or slightly brown if obtained from peaty ground. Neesler's test, which may be purchased from a chemist, can be applied to water, which, if impure will become yellow or brown, but if good will remain bright and clear.

DRAINAGE. The "two principal methods of carrying waste matter from a house or building are the water carriage system and the conservancy or dry system.

The former is that which is generally to be met with, especially in towns, being the cheapest, cleanest, and most convenient way of removing sewage. Pipes, drains and sewers of iron, lead and earthenware, are laid for the purpose, together with the plumbing attachments inside the house, such as sinks, basins, baths, and water-closets, with their traps, plugs, supplytaps, and other smaller parts.

The principal parts of the main sewage system for houses are the soil pipe, waste pipes, house drain, traps, inspection chamber and the city

sewer.

THE SOIL PIPE, which opens directly into the house drain, and is not trapped, conveys waste from the closets to the house drain. It should be

3½ to 4 inches in diameter, and built away from the walls of the house, the ventilating shaft extending above the eaves to a height of at least three feet beyond any room, and surmounted by a grating to prevent the entrance of birds or leaves.

Rain water pipes to carry away the rain from the gutters and roof of a house should be two inches away from the wall, and should discharge over a gully trap in the yard, and not directly into the drain. The mouth of a pipe should be about one foot above the gully.

Waste pipes conveying the water from basins, baths and sinks, discharge over a similar gully trap, and all those leading into the waste pipes are trapped and provided with antisiphonage pipes at their highest points to prevent the trap from becoming unsealed by siphon action.

THE HOUSE DRAIN, which connects directly with the main sewer, is laid in a four-inch bed of concrete, preferably at the side of the house, not beneath it, with a slope of not less than one foot in forty, the pipes being of earthenware and four inches in diameter. If unavoidably placed beneath the house, the pipes must be covered with concrete above and below. At its highest point a ventilating shaft of iron, extending above the roof of the building, should be affixed, to prevent the escape of gases into the interior; the top of the pipe is protected with a grating.

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One of the most important items, of house-plumbing is the installation of suitable traps to every pipe leading into the drain. That popularly known as the "S" trap, or double bend in a pipe, is the most efficacious in preventing the escape of sewer gas, the bend retaining a portion of the flushing water, which acts automatically as a seal. Air must be allowed to enter at the outlet, or the pressure of that at the inlet may force the water out of the trap and thus render it useless, and on no account should two basins or sinks share one trap, or the water may pull cut or "siphon" from it. Bath, sink and lavatory basin traps should be furnished with a screw at the lowest part, in order that any collections of "fluff" or waste may be periodically removed.

TO CLEAR CLOGGED SINKS OR BATH PIPES. Dissolve one pound potash in a quart of boiling water, turn off the taps, and pour the mixture into the pipes, leaving it all night. The clogged matter will be converted into soft soap by the potash, and the first flushing with water will clear the pipes.

It being necessary to examine the drains from time to time, an INSPECTION CHAMBER, or hole in the ground, built of some non-porous substance, and provided with an inlet for air, and a tightly fitting lid of iron, heavily greased, to make it airtight, should be provided. The drain passes through the inspection chamber and is trapped before entering the main. (See Diagram 4.)

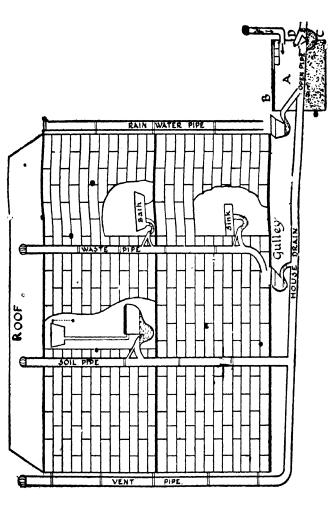


DIAGRAM 4. OUTSIDE OF HOUSE SHO VING VARIOUS PIPES.

(b) airtight iron door. (f) fresh air inlet. (e) TO SEWER. (a) DISCONNECTING MANHOLE CHAMBER IN HOUSE DRAIN. (c) SIPHON TRAP. (d) RAKING ARM. (e) TO SEWPD

THE MAIN SEWER is that which collects from all the domestic sewers and conveys the waste either to the sea or to special farms for the purpose. It is composed of large socket pipes up to eighteen inches in diameter, round, oval or egg-shaped, and is laid in a bed of concrete.

These pipes, if made of iron, have the advantage of fewer joints than those of other materials, and they are usually made in twelve-feet lengths.

Basins and sinks, deep enough to prevent splashing, and made of glazed stoneware orporcelaif, are the most sanitary, and very easy keep clean. They should slope towards a waste pipe, which has a grating at the top to obstruct the passage of anything other than liquids. Baths of vitrified material or enamelled iron are the usual type fitted into houses, and should stand well off the ground. These as well, as all basins should be provided with hot and cold water supply taps, and a properly constructed waste pipe. Nickel attachments will be found less trouble than brass. Water-closets. if possible, built against an outside wall to ensure rapid emptying, should possess a separate cistern capable of holding about three gallons of water, and a pan of modern sanitary construction readily cleansed. The pipe from the pan must be trapped and must be securely jointed at its junction with the soil pipe, and the anti-siphonage pipe should be carried up the side of the soil pipe and not into it. (See Diagrams 5 and 6.)

The conservancy, or dry method of drainage, is adopted in places where there is a shortage of

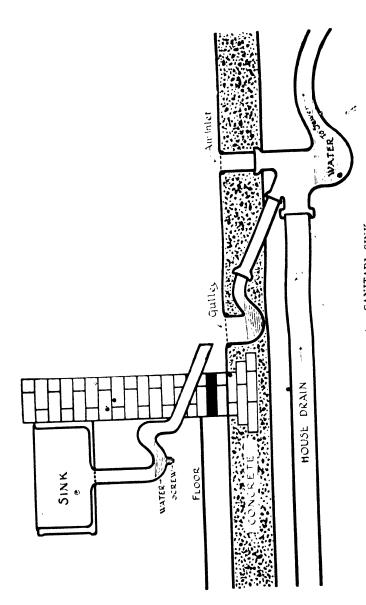


DIAGRAM 5. SANITARY SINK.

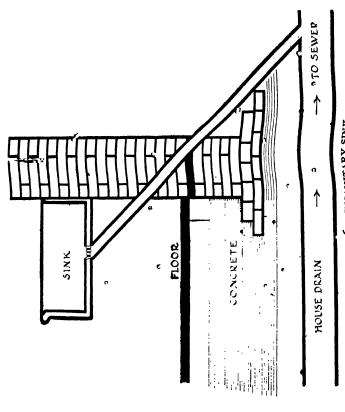


DIAGRAM 6. INSANITARY SINK.

water, or in cold countries where water would be frozen. All middens and privies, receptacles built above the ground level, should be well cemented at sides and bottom, and so constructed as to be easily and frequently cleaned from the back. It should be roofed in and the seat should be linged. They should be well ventilated and not placed nearer to the house than nine or ten feet. Ashes should be freely used.

.DRY EARTH CLOSETS. In this system a pail is used inside the fixed receptacle, Gry earth is mixed with its contents, which, when full is applied to the garden. Automatic dry earth

closets can be purchased.

Though useful in districts where a sufficient fall cannot be secured for a sewer, where water is short, or disposal of much waste liquid is difficult, this dry system requires constant supervision, and entails much work to guard against the evils arising from possible decomposition. Slop water and liquids must be disposed of, either by directing it into a cesspool for subsequent use on the land, or by sub-irrigation (pipes of porous material with open joints at intervals, carrying the waste directly into the ground). Cesspools are a menace to health unless properly constructed and self-emptying.

All kitchen and house refuse should be burned, if possible, either in the kitchen grate well shut in with the dampers open, or upon a bonfire. whose ashes may be employed for fertilization. If the refuse is burnt in the kitchen care should

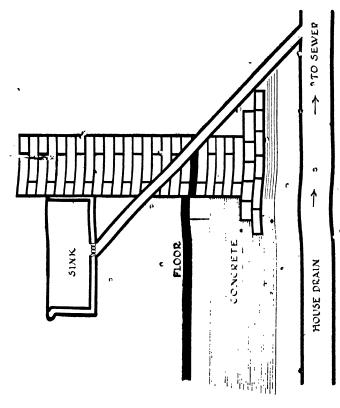


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DRY EARTH CLOSETS. In this system a pail is used inside the fixed receptacle, dry earth is mixed with its contents, which, when full is applied to the garden. Automatic dry earth

closets can be purchased.

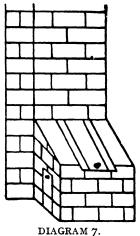
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be taken that the window is open and the door shut.

Dustbins should be portable, sanitary, and frequently emptied, and kept clean. They should be placed at least fix feet away from the house, and never near to larders, storerooms and windows. Brick bins built against a wall are unsanitary.

Round, galvanized iron portable dustbins, fitted with handles and lids, are considered the best. They should be emptied at least once a week and should be washed periodically by being filled half full with hot water and a large piece of soda, then scrubbed with a garden broom, rinsed, dried with a rubber, and afterwards left open in the air until perfectly dry. (See Diagrams 7 and 8.)



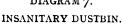




DIAGRAM 8.

SANITARY DUSTBIN.

CHAPTER III

VENTI ATION; HEATING; LIGHTING

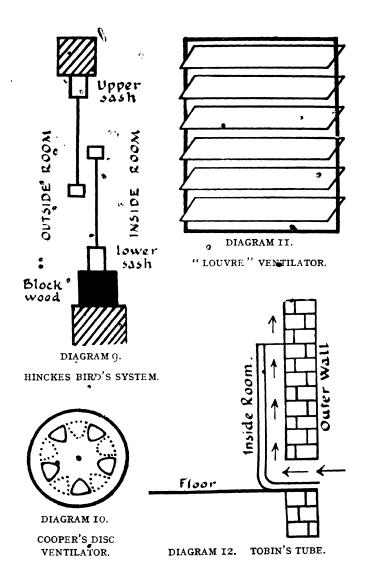
VENTILATION. Air, that colourless, transparent mixture of gases forming the atmosphere which surrounds the earth to a height, it is supposed, of forty miles, and whose oxygen is the first essential to the maintenance of life, is composed of 77.95 parts of nitrogen, 20.61 of oxygen, 04 of carbonic acid gas, and 1.40 of aqueous vapour in 100 volumes. Slight traces of mineral salts, nitric acid, ammonia, ozone and organic matter are also to be found in the atmosphere, and its general weight or pressure is about fifteen pounds to the square inch at the sea-level.

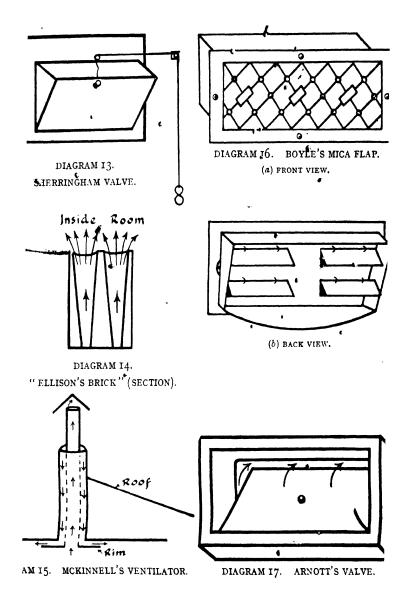
Since a healthy individual requires some 3,000 cubic feet of pure air each hour, the problem of ensuring a continual supply to buildings, and the carrying off of the vitiated air therefrom, is one which must claim the first consideration of the householder. The aim of a good system of ventilation is to admit and evenly distribute

fresh air, at the same time dispelling impure air without creating a draught, or unduly lowering the temperature of a room. Though the schemes for effecting this are many and varied, the most common inlets and outlets employed in dwellings are, of course, the windows, doors and chimneys.

Heated air, being light, expands and fises, passing out of the room through outlets near the ceiling, or ascending the chimney, being drawn up by the wind passing over the top of the chimney. The vacuum thus caused is filled by the pure air from outside entering by the windows, doors and other inlets, and mingling with the air in the room, without causing an unduly sudden change of temperature.

Ventilation with the windows as agents can be effected by opening them at the top and bottom if they be of sash form, or at the top if they be of hinged form. To prevent a down draught with hinged windows where they open inwards, sides of wood or glass should be attached. Venetian blinds over an open window are also useful in directing the incoming air into an upward direction. Dr. Hinckes Bird's patent is a practical method of allowing fresh air to enter between the two sashes of a window without creating a draught, and consists of a board four inches broad, inserted beneath the lower sash. Wire gauze is frequently fixed across the top part of a window, and is effective for larders and other places where it is necessary to prevent the ingress of flies, etc. A glass disc, through which five oval holes are pierced to





correspond with others in the window pane, and mounted on a pivot, may also be recommended, since this can be opened or shut at will. It is known as Cooper's Disc, and is somewhat similar in effect to othe "Louvre" and "Moore" ventilators, which consist of strips of glass substituted for a pane of glass. The "Moore" is so arranged as to be manipulated in the same manner as a venetian blind. (See Diagrams, pp. 31 & 32.)

Several methods of wall ventilation may be resorted to. The Sherringham valve is an iron box inserted near the ceiling, fitted with an opening and closing valve which directs the air in an upward course as it enters. Tobin's tube introduces outside air at the floor level, and passes it up a vertical tube to a height of six feet, the mouth of the outlet being protected against dust by a gauze covering. "Ellison's Brick," built into a wall, is pierced with cone-shaped holes, the large ends of which face inwards for the better distribution of the fresh air. Inlets are most effectual if placed six feet from the level of the floor, the current of air being gradually distributed, and no draught being felt by the occupants of the room.

For small rooms, the chimney of an open fire is usually sufficient outlet for vitiated air, but additional means of egress may be fixed in the wall over the mantel-piece and connected with the shaft of the chimney. Dr Arnott's valve and Boyle's valve are two of the most popular fitments of the kind. Dr Arnott's valve is an iron box with a metal valve swinging into the chim-

ney at the top of a room, whence it draws in the heated air; the disadvantages are that it occasionally allows a reflux of smoke, and that the action of the ventilator has an unpleasant clinking sound.

Boyle's valve, on the same system as Dr Arnott's, from the lightness of the swinging valves, which are made of talc, does not emit so objectionable a noise; behind a fancy grating in the room, the four talc plates swing very

lightly back into the chimney.

McKinnell's ventilator is a combined inlet and extlet arranged for the ceilings of rooms directly under a roof. The inner tube passes out the foul air, while the outer admits the pure air from outside, directing it upwards with the assistance of a rim affixed to the bottom of the inner cylinder.

Artificial ventilation may be accomplished by the vacuum method of drawing the air out of a building, or by the Plenum method of forcing fresh air into it, and driving out the impure. These means are adopted largely upon board

ship, in prisons and institutions.

To keep the atmosphere of a house healthy and fresh, it must be frequently changed. Have all the windows and doors at the lower part of the house opened the first thing in the morning for five to ten minutes, and see that a staircase window is always open. If there is danger of burglars, a grating may be fixed or the sashes screwed together.

In the bedrooms, windows should be open by night as well as by day, and where these are

badly placed with regard to the doors and chimneys, screens may be resorted to for the prevention of draughts. Good ventilation in a bedroom is much impeded by storing trunks and boxes beneath the beds, or keeping soiled linen in the room. Gas should not be kept burning throughout the night.

In the sitting-rooms, the air must be charged several times a day by opening the windows wide at top and bottom, particularly before

and after a meal.

HEATING. It would be difficult to lay down a hard and fast rule as to the proper temperature to be maintained in a house, since this is usually governed by the personal feelings of the inmates. For general health and comfort, however, sitting-rooms may vary between 60° and 65° Fahrenheit, and bedrooms may be kept slightly cooler if desired. In the case of the aged, invalids, and young children it is highly important that rooms should be kept at an even temperature, a sudden rise or fall frequently proving disastrous.

Heat may be communicated either by radiation, passing in straight rays from the source to the object against which it strikes, the warmth being conveyed first hand, as the warmth of the sun to the earth; or by convection, the transmission of heat by currents, for example, the heating by hot water or steam pipes or currents

of hot air.

Heating by open grates or closed stoves, radiation.

Heating by hot water pipes or steam pipes, convection.

drates and stoves. Still the most popular and cheerful mode of heating houses, though perhaps not the most efficacious, is the old-fashioned open grate, in which coal, wood or

peat may be burned.

While the open fire is pleasant looking, it assists in ventilation, and warms the object placed before it without unduly heating the air, which it neither dries nor contaminates with impurities. On the other hand it is not economical, much fuel being used for the amount of heat yielded; also a great deal of heat escapes up the chimney, constant attention is required to keep it burning, and its cleanliness cannot be recommended, ashes and soot being the natural result of this method of obtaining warmth.

The grate should be constructed with the object of giving a maximum heat with a minimum consumption of fuel, and should be placed well forward so that the heat may be thrown into the room, while the smoke alone ascends the chimney. Firebricks assist radiation, and where there are bars upon which the coal rests, these should be placed close together, so cinders may not fall through and be wasted, and vertical bars inserted in the front to aid slow combustion, while an "economizer," at the bottom of the stove will shut off the draught if required.

A grate with the back one-third as wide as the front, with sides sloping towards the bottom,

back tilted forward, and fitted with an adjustable canopy at the top, will be found both economical and efficient. Iron, being a conductor of heat, hindering radiation, should be used as little as possible in constructing fire grates, and the throat of the chimney, if small, will cause greater draught and induce more complete combustion of fuel.

On the closed stoves, the best are those specially constructed to admit air by means of pipes. Coal, coke and anthracite coal may be employed as fuel, the last mentioned, a slow burning coal with a very high standard of heating power, being the most economical; indeed, it is claimed that the average cost with this fuel is about 1½d.

for twelve hours burning.

While only a small amount of fuel is necessary for closed stoves, it may be argued against them that they do not aid in ventilation, are not cheerful looking, may produce a "close" smell, and hy drying the air may affect the skin, hair and lungs of human beings, besides allowing the escape of some of the gaseous products of combustion into the room due to hot iron being porous.

GAS. Gas, an elastic fluid substance, the molecules of which are in constant motion, exerting pressure, can be obtained from bituminous coal, or from a mixture of this with cannel. As a heating medium, it is clean, convenient and easily regulated, but it is considered more expensive for continuous use than coal. Unless the

room be properly ventilated, and provision made for the fumes from a gas-stove to ascend a flue or chimney, an unpleasant stuffy smell will arise. • One of the chief points in the favour of gasstoves is that they are ready to light at any moment, and can be turned off at will.

OIL. Where other means are not easily obtainable, oil-stoves are useful, but constant care must be paid to the cleaning and trimming of them to avoid smell. Again, the air may be vitiated when employing them, unless they can be put in a fire-place with the chimney as an outlet for fumes.

ELECTRICITY. Electric radiators are å useful, clean and efficacious means of warming a room, though they are expensive to use unless great care is exercised. They may be moved from one place to another, switched on and off at will, and cost comparatively little to install.

HOT PIPES. Hot water, steam, and hot air pipes are cleanly methods of heating, and a uniform temperature may be secured in large buildings, institutes, etc., with their aid. Water is heated by means of a furnace in or near the basement of the building, and the water onsteam passes through pipes to every part. Heated air passes along flues to the various rooms. The principal disadvantage of this mode of conducting warmth is that the temperature is not easily regulated, and a stuffy atmosphere is frequently the result.

LIGHTING. Gas from coal is still the most common form of artificial light, though it is prophesied that electricity is the illuminant of the future, and, indeed, it is even now superseding all other lighting mediums. Gas was produced and used towards the end of the eighteenth century in Birmingham by William Murdoch, and was first used in London about 1807, one side of Pall Mall being illuminated with it. It varies in lighting power according to its quality and pressure, its value depending upon the proportion of olefiant-gas and carbon present. In recent years its power has materially increased by the use of the incandescent burner which has now practically supplanted all other patterns, since it economizes the amount of gas consumed, gives a clearer, steadier light, and can be arranged to switch on and off as may be desired.

The nozzles of the best burners are of clay or steatite; both being non-conducting substances they will keep the temperature as high as possible, and secure the maximum illuminating power from the gas. To give a good light, a sufficient pressure of gas is needed to show a flame of from three to four inches, and the burner should be fitted with a regulator and air-adjuster. A bypass, though not essential, is found convenient. Incandescent burners may be procured of an upright pattern, or inverted, the latter being the most efficacious where the light is required to be thrown in a downward direction; a central light is the best for any work requiring close focus.

All fittings must be kept in good condition; chimneys, globes and shades may be removed and washed, while burners may be cleaned with a soft bottle brush or piece of cloth, taking care that the inside of the tube receives attention. Incandescent mantles of good quality will alone be found economical in the long run. When once fixed, these should not be touched nor exposed to severe draught. To fix a new mantle: Remove every particle of the old one, and blow out the dust; take the new mantle from its cover by means of the thread provided and hang it on the prop in the centre of the burner; apply a lighted match to the top of the mantle, and allow it to burn out before replacing the chimney and shade. Should it be necessary to remove a mantle after adjustment, it may be taken off the prop with a knitting needle passed through the loop, and allowed to hang in a jug clear of the sides, with the needle across the top as a support.

In lighting gas have the match well ablaze before turning on the tap. Where gas is used for cooking purposes, the supply pipe tap should be turned off at night, and care should be taken to

guard all pipes from possible injury.

Should a smell of gas be detected in the house, on no account must the rooms be entered with a lighted candle or match. The windows should be opened, the tap at the meter turned off, and a gasfitter's assistance procured, or the gas company notified. Small leakages may be temporarily stopped with a plugging of yellow soap or paste of flour and water.

When leaving a house empty, the main tap at the meter should be turned off, and when changing houses, it is advisable to instruct the gas company to remove all stoves are meters.

In order to check unnecessary waste, and to safeguard against errors in the accounts for gas consumed, every householder should understand a gas meter, and be able to correctly read the recording discs.

When renting a furnished house, it is wise to let the gas company's officer read the meter before taking up residence. All meters are stamped, and the company is responsible for the good condition of those let out on hire. Should the consumer be dissatisfied as to the accuracy of the meter, a Government inspector may be asked to test it, the consumer paying the costs incurred if it be found correct and in good order. Access to the meter must at all times be given to the company's officer, whose duty it is to make a periodical inspection, and a penalty of £5 may be exacted from a tenant withholding such facilities.

TO READ A GAS METER. In a new meter, all the hands on the discs will point to zero, or o. As soon as the gas has been used, that on the right-hand dial will be seen to move, in the same manner as the hand of a clock; when this has completed one circle, it indicates that 1,000 feet of gas has been consumed; simultaneously with the completion of one round by the hand on this

dial (A), that on the second dial (B) will move to "I" When a complete circle is recorded by dial (B), the hand on the third dial (C) will move to "I" indicating that 10,000 feet of gas are exhausted. In the event of a hand being placed between two figures, the amount indicated by the lower is recorded, except if between 9 and 0, when 9 is read. To ascertain the consumption of gas since the last reading of the meter. Begin with dial (C), and write down the number to which each hand points, adding "oo" at the end. This will show the present state of the meter; deduct the number of cubic feet last recorded on the card, and the result represents the consumption of gas since the previous reading. (See Diagram 18.)

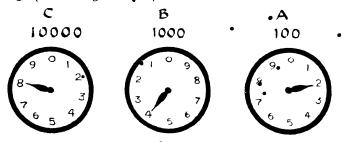


DIAGRAM 18. GAS METER.

In a district where gas works are not exected, and electric light is unknown, a small compact machine, for manufacturing air gas from ordinary motor spirit, may be installed upon the premises for a reasonable sum, in many cases for as little as £40, including all piping and fittings. Easily fixed, and occupying little space, this apparatus

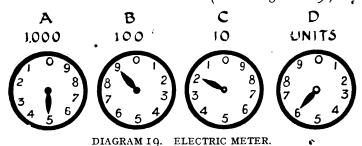
is safe, economical to use, and requires but simple attention. The light obtained is soft, brilliant, and steady, does not affect flowers, blacken ceilings nor decorations, and can be burned without ill effect in an unventilated room, being non-poisonous and non-explosive. The mantles used in conjunction with this system are elastic and practically unbreakable, being composed of soft silk and free from stiffening.

ELECTRICITY. By far the most convenient and clean medium for illuminating, heating and cooking, is undoubtedly electricity, though, its cost renders it prohibitive at present for general domestic use. As an illuminant it is not expensive, if carefully managed, and the fittings are good, and the light obtained is clear and steady. The supply is controlled by switches, which may be turned on and off at will. All lamps, shades, and fittings should be kept.clean and free from dust, and should be carefully treated. In this way a good lamp will act successfully for about 800 hours, after which time the light-giving properties will diminish, although the same amount of current will be consumed. Before purchasing new lamps it is imperative to ascertain the voltage supplied by the wires which are installed, so that a corresponding power may be ensured. Should an accident occur or the light fail, the services of a qualified electrician must be solicited, since amateurs not infrequently add to the trouble, when endeavouring to remedy it.

44 HOUSEHOLD MANAGEMENT

Electric meters are usually supplied by a company upon a small returnable deposit, or the meter may be fixed for the 1s. in the slot supply. A meter may be tested, in the same manner as a gas meter, by a County Council electrical engineer for a fee varying with the size of the meter.

To read an electric meter, proceed as with a gas meter, but having read all the dials, do not add "oo" at the end of the row of figures; electric current is reckoned by units, whereas gas is enarged by the 100 cubic feet. The right hand dial (D) indicates the number of units consumed, (C) tens, (B) hundreds, and (A) thousands of units. Having read the meter, deduct the number of units ascertained at the last reading, and the remainder will represent the current consumed since that date.* (See Diagram 10.)



OIL. Oil lamps, though not now in general use, are still the principal means of lighting in many

^{*}One unit is equivalent to 1,000 watts consumed in one hour and costs from 3d. to 7d. for lighting. One unit of electricity is equal to about 33 feet of gas.

country districts, and in localities not provided

with gas and electricity.

Paraffin or petroleum oil is usually employed, and when good has a bluish tint, the "flashpoint," or temperature at which the oil flashes, being fixed by the Government at 73 per cent. To use an illuminant with a lower flashpoint is dangerous. A few shreds of camphor or albo carbon, put into the well of the lamp, improves the light, which is soft and restful for reading. sewing, or other occupations. The main disadvantage in the use of oil lamps is that they are troublesome to keep clean, and, unless of good pattern and well made, are apt to be the cause of unpreasant smell, or possibly an accident. In choosing a lamp, see that it has a wide base. well weighted; a reservoir of metal rather than glass or china, with a separate hole for filling, provision for air to enter; an extinguisher and a flame diffuser. Lamps with circular wicks give the best light, but require more attention in cleaning than the duplex or single wick pattern. The head of the lamp should be secured to the oil receptacle either by a screw or bayonet fitting.

Chimneys should fit easily into the socket, allowing room for the expansion of the glass when heated, though not loose enough to fall out. They should be fire-proofed, which can be done by placing them in cold water, bringing it to a boil, boiling for four minutes, then cooling in cold water, to prevent cracking.

Wicks should be firm in texture, and fit well

in the lamp, though not too tightly; they require to be changed from time to time, and if soaked in vinegar and thoroughly dried previously to use, will give a much improved light. It is a mistake to allow too much wick to hang unused in the reservoir; a fairly short one just touching the bottom is better in every respect.

Where possible it is advisable to set apart a small room or corner for the keeping and cleaning of the lamps. A shelf or part of a shelf covered with oil cloth, and a metal tray for the filling, will be found useful and clean. The oil-can requires a lip or spout for convenience in filling the wells, and a lamp brush, scissors, soft dusters, newspaper and leather are needed for the rest of the work. After removing and polishing the shade and chimney with a soft duster, place them out of reach of the oil; turn up the wicks and pinch off the charred parts with paper, avoiding the use of scissors unless absolutely necessary; fill the oil receptacle to within about half an inch of the top, taking care not to run the risk of an explosion by over-filling; remove all dirt and charred wick from the burner before replacing the chimney; rub the lamp with a soft duster, then polish with the leather; care in wiping the tools and tray must be observed, and lamps should always be filled in the daytime.

To keep lamps in good working order, they should be occasionally taken to pieces, thoroughly washed and dried, the burnt marks in the glass removed with powdered pumice stone or salt, and the burners boiled in water to which washing soda has been added.

When lighting a lamp, remove the chimney and shade, unless a lever be fitted for raising these; apply a match to the wick and turn it down; replace the chimney and shade, raising the wick as soon as the steam has passed off.

When extinguishing a lamp turn the wick down and put it out with the aid of the extinguisher, or if the burner be not fitted with one, place a piece of cardboard on the top of the glass, thus excluding the air and putting out the fiame.

CANDLES. Until 1792 candles and all lamps were the only means of lighting streets and dwellings in England.

Candles may be manufactured from tallow, sperm or composite wax (a mixture of carbon and hydrogen), in which a wick of cotton is encased. By the burning wick, the fatty substance is melted, drawn up and decomposed by the heat. The carbon in the candle is the lightgiving property, and unites with the oxygen in the air, forming carbonic acid gas. Candles may be purchased by the pound weight, or in packets of three pounds, the number to the pound varying with the size of the candle; eight to the pound is a good size for bedroom use. Where the candles are not self-fitting the ends may be softened in warm water and pressed into the candle-sticks. The light from candles is soft, and decorative for table use, when fitted with a suitable shade. Arctic candles, white enamelled metal tubes,

with a spring inside and a screw top, into which the ordinary candle is placed, with the wick protruding through a small hole for the purpose, are useful for preventing the shades from taking fire, and keep the candle always at the same level. Glass chimneys to candlesticks are desirable where they must be carried from place to place.

CLEANING CANDLESTICKS. If metal, put them in boiling water and when the grease is melted, wipe dry and polish according to the kind of metal. If of glass or china, remove the grease with a blunt instrument, then wash in

warm soapy water, rinse and dry.

Several uses may be found for candle-ends. They form excellent fire-lighters, and when melted and mixed with turpentine may be employed as a floor polish. Again, home-made night lights have, been manufactured from melted candle-ends into which a cotton wick is introduced; these articles, however, may be bought so cheaply, that the result achieved with the home-made variety hardly justifies the trouble involved.

ELECTRIC BELLS. A simple circuit, emanating from a battery enclosed in a box or placed upon a shelf, supplies the current for electric bells. The bell itself is a magnet with a vibrating armature, to which is attached the hammer against the gong. Beneath the "push-button" cover of wood, metal or china, are two metal

springs which are brought into touch with one another when the push is pressed. Near the bell will be found a number of magnets, fitted with discs or flags to indicate from which room the summons has come.

When recharging the cells or jars, first empty all the water, and re-fill to about three-quarters with clean water; place into each jar two ounces of sal ammoniac, and the bells will act about two hours later. Failure to ring on the part of the bells may be due to insufficient battery power, owing to a shortage in the number of cells allowed as reserve, or to the exhaustion of the sal ammoniac in the jars, or to what is known as a short circuit.

CHAPTER IV

LANDLORD AND TENANT

It is highly important that the landlord and tenant should be thoroughly acquainted with the legal aspect of their relationship—preferably before that relationship comes into being. The relation implies a tenancy.

Tenancies may be created by Agreements for

Leases, or Leases.

The Lessor is the person who grants the lease, and the Lessee the person to whom it is granted.

AGREEMENTS FOR LEASES. These may be either (1) Agreements intended to be preliminary to formal leases; (2) Agreements intended to operate as leases and so create tenancies without the execution of any further documents.

An agreement of the first class should contain the names of the parties, a description of the premises, the amount of rent, and the date of commencement and the duration of the term. It should also indicate clearly what covenants it is intended that the lease should contain, and it should provide for the payment of the costs of

the agreement and the subsequent lease, which are usually payable by the lessee. If the lessee intends to spend much money on the premises, he should stipulate for the production of the lessor's title. If no such stipulation be made, the landlord, if a freeholder, is not bound to show any title, or if a leaseholder, he is only bound to produce the lease under which he holds. If the landlord is a leaseholder, his lease should in all cases be carefully examined before the agreement is signed. An agreement of this class may be contained in letters between the parties or their agents, provided the premises, the commencement and duration of the term, and the flames or descriptions of the parties are stated. An intending lessor may therefore find himself bound by the correspondence even though his intention was that the terms arranged should be embodied in a formal agreement for a lease as a preliminary to the execution of such lease. A mere provision that a formal contract shall be prepared does not prevent the informal contract from being binding, but it is otherwise if it is clearly stated that the arrangement is made subject to the preparation of a formal agreement.

An agreement of the second class intended to operate as a lease may be "under hand" if the term created by such agreement does not exceed three years. Such an agreement is to all intents and purposes a lease. A lease for more than three years must be "under seal" i.e., by deed.

LEASES AND AGREEMENTS OPERATING AS LEASES. The principal clauses in these documents on which a few remarks may usefully be made are those relating to: (1) The term (2) The rent and (3) The tenant's covenants or agreements.

(I) The term for which a lease is granted may be any fixed period, as a month, a quarter, a year, three years, seven years, etc. Such a term expires at the end of the period without notice, unless there is an indication that the parties intended the tenancy to continue after such period until any particular notice be given.

A lease or agreement may also create a tenancy "from year to year," or a yearly tenancy which can be determined by six months' notice, expiring at the end of the first or any subsequent year of the tenancy. Such a tenancy may also be created by a tenant's "holding over" and paying rent after the expiration of his lease.

Other periodic tenancies which may be created by leases or agreement, e.g., quarterly, monthly or weekly tenancies, are like a yearly tenancy and terminable by notice to quit, such notice being equal to the period of the tenancy and expiring at the end of a quarter, month, week or other period of such tenancy. A notice to quit may be given by the landlord or by the tenant and should be in writing.

(2) The rent. The tenant has the whole of the rent day in which to pay, as the rent is not in arrear till after midnight. As soon as the rent is in arrear, the landlord has the right to distrain.

The tenant is not liable for rent after he has been evicted, but he cannot escape liability by abandoning the premises. If, after he has gone, the landlord actually uses the premises, that constitutes an eviction and no further rent is payable. So if the landlord re-lets, unless he re-lets on the tenant's behalf and gives him notice. Occupation by a caretaker is not a use of the premises by the landlord so as to constitute an eviction.

(3) Lessee's covenants or agreements. Apart from the covenant to pay rent, these covenants usually relate to (a) rates and taxes (b) repairs (c) insurance (d) agreements not to assign or underlet (e) yielding up possession.

(a) Rates and taxes. The texant usually covenants or agrees to pay rates and taxes. Even without such a covenant most rates and taxes fall on the tenant, e.g., the poor rate, general district rate and water rate.

There are, however, certain impositions or assessments which are prima facie payable by the landlord, but the words of the covenant may shift these on to the tenant. Property tax, land tax, and assessments imposed in respect of permanent improvements such as sewers, paving, etc., are instances of these, and in the case of a long lease the tenant often undertakes to pay them by undertaking to pay "outgoings," "impositions," "charges," etc.

As regards the property tax, the tenant pays this, but he is entitled to deduct the amount from the next payment of rent, provided he has

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actually paid the tax, such payment operating as a payment pro tanto of the rent. He cannot by any agreement deprive himself of the right to make this deduction. As regards the land tax, the tenant (unless he has deprived himself of the right to do so by agreement), may deduct such proportion of this tax as his rent bears to the assessed annual value of the premises.

As in the case of other landlord's taxes, the tenant usually pays the SEWERS TAX_a in the first instance and deducts the amount from the rent, unless he has agreed to pay the tax himself.

THE POOR RATE falls on the occupier. The tenant of a part of a house may be assessed to the poor rate if he has exclusive possession, but not if he is merely a lodger. The money raised is intended for the relief of the poor, and for the expenses of the elementary and higher grade education, evening continuation schools, etc. The amount of the rate varies in different districts.

ASSESSED TAXES, as inhabited house duty, duties on carriages, dogs, game certificates, etc., naturally fall on the tenant in the absence of agreement.

GENERAL DISTRICT RATES AND IM-PROVEMENT RATES fall on the tenant, but as regards the latter rates he is usually entitled to deduct three-fourths from his rent. The General District Rate is levied for street improvements, highways, sewers, street lighting. watering roads, etc.

(a) WATER RATES. The water rate is chargeable according to the annual value of the premises, and is payable in advance, generally on the four usual quarter days, but in the area of the Metropolitan Water Board, on the 1st of April, July, October and January. Where a house is unoccupied at the beginning of a quarter, the company can charge only so much of the quarter's rate as is proportioned to the priod of occupation, even if they have had no notice and have continued to supply water. The rate may be recovered by summary method of distraint and the company have the power to cut off the supply.

. Consumers are bound to keep taps in good repair to prevent the waste of water, and the company's inspectors have the right to enter the house, to satisfy themselves that the pipes and taps are in good condition. The water company makes use of an instrument called an "Aquaphone," by means of which waste of water can be successfully detected. Before leaving a house the tenant should notify the water company of the date of quitting, and of the future address, so that the necessary alterations may be made

in the rate books.

INHABITED HOUSE DUTY is payable on or before January 1 in the year of the assessment, which is taken from April 6th of one year to

April 5th of the next. The amount of the tax varies according to the annual value of the houses, those bringing in a rent of less than £20 per annum being exempt from the payment of the duty. Notice should at once be given to the surveyor of taxes should a house become unoccupied within a year, otherwise duty will be charged for the whole year; the incoming tenant should notify the surveyor, so that the duty may be levied for the end of the preceding quarter instead of for the whole year.

LAND TAX is a tax levied by the Government, the quota payable by each parish having been fixed in the year 1798. The amount is raised annually by an equal pound rate, which at the present time must not exceed is, in the \pounds . Where the individual owner of the land has an income not exceeding £160 per annum, he is exempt from land tax, and where the income does not exceed £400 per annum, one-half of the tax is remitted, but he must lodge his claim before payment.

The tax is levied upon the annual value of the land and is assessed from March 25 of one year until March 24 of the next, the amount being payable on or before January I. Tenants may deduct the amount of land tax paid at the beginning of the year from the next payment of rent, unless by agreement with the landlord they have arranged to pay it.

In many parishes the proportionate part fixed, in the year 1798, as payable by them.

has been entirely redeemed; in others it has been partly redeemed.

Income tax in the United Kingdom is payable on or before January I of each year, and is calculated from April 6 of one year till April 5 of the next, and all persons residing within the United Kingdom, whether British subjects or not, are liable to pay the tax, provided that their total income amounts to more than £160 per annum. Even though the owner reside abroad tax must be paid upon incomes derived from property or trade in the United Kingdom.

When the income does not exceed £700, abatement may be claimed, the amount of which varies with the total sum of the income; a table of abatements allowed may be seen upon the income-tax papers which are sent to tax-payers each year. In other cases, the tax is levied upon the full net income, but allowances are made for life insurance premiums.

The amount of the tax varies from time to time with the needs of the country as estimated by Parliament.

(b) REPAIRS. No covenant will be *implied* on the part of the landlord to do any repairs whatever, whether structural or otherwise, in the case of an unfurnished house. So there is no implied covenant on his part to rebuild in case of fire. But where the premises become dangerous to health or give rise to a nuisance the tenant

may, under the Public Health Acts, in the absence of agreement to the contrary, throw the liability on the landlord; but all the steps

prescribed by the Acts must be taken.

In the case of furnished premises an undertaking, is, however, implied on the part of the landlord that the premises are reasonably fit for habitation at the commencement of the tenancy. The landlord has also certain implied obligations under the Housing and Town Planning Act, 1909, and these continue throughout the term.

A covenant will be implied on the part of the tenant to use the tenement in a tenant-like manner and this may necessitate doing certain repairs, the limits of which are not very clearly defined. They have been said to include an obligation to keep the premises "wind and water tight," but not an obligation to do "substantial" repairs.

An express covenant, however, either on the part of the landlord or the tenant will usually displace all implied covenants. Nearly always the tenant covenants to repair, and, as in the case of other express covenants, he cannot escape from liability by assigning his lease. A general covenant to repair includes the liability to rebuild in case of fire, even though the landlord has received the insurance money, and an exception of fire, tempest or inevitable accident should be inserted on the tenant's behalf. It is not quite clear how far an exception of "fair wear and tear "will exonerate the tenant, but

probably both as regards the outside and inside of the premises he will be exonerated where the want of repair is caused by a reasonable use of the premises. A full repairing covenant on the part of the tenant is usual only when the term created is of some length.

(c) INSURANCE. It is not usual to insert exvenant: to insure in leases of less than seven years. The insurance is usually effected by the landlord for his own protection.

Destruction by fire does not, in the disence of agreement, determine or suspend the tenant's liability to pay his rent. The parties should agree that no rent shall be payable until the premises are reinstated, if the term created by the lease is of any length, or the tenant should "insure his rent." Unless the landlord has covenanted to repair he need not rebuild, even if he has received the insurance money; but before he has actually received it the tenant may apply to the insurance company to have the premises reinstated. If the premises are destroyed by fire, through the negligence of the tenant or his servants, he is liable; but not if the fire be accidental, unless he has covenanted to repair without accepting damage by fire.

The tenant, should, of course, insure his own property, including all fixtures which he is entitled to remove. The amount for which his goods are insured represents the maximum amount he is entitled to claim. Overstating the

value of property or understating the fire risk

may vitiate the policy.

The tenant should also insure against burglary, house-breaking, etc., and against employers' liability to cover injury to servants in the course of their employment.

A careful note should be made of the conditions of all policies and this should be referred to from time to time in order to see that such conditions are being observed.

COVENANT AGAINST ASSIGNMENT. The tenant usually covenants not to assign, underlet, or part with the possession of the premises without the consent of the landlord, such consent not to be unreasonably withheld. The landlord's consent is usually required to be in writing.

INFECTION. A landlord is liable to be fined an amount not exceeding £20, if he knowingly lets premises in which there has been an infectious case, without first having such premises, and all articles likely to retain the disease germs, disinfected to the satisfaction of the Medical Officer of Health, from whom he should receive a clearance certificate.

If a tenant fails to notify, or makes a false statement in respect of an infectious disease upon any premises, within a period of six weeks prior to the re-letting, a fine not exceeding £20, or a month's imprisonment may be imposed.

FIXTURES. On the termination of the

tenancy a question often arises with regard to fixtures. If the articles have not been affixed to the land or premises, they are not really fixtures and can be removed by the tenant at the end of the term, and this applies where an article is not completely affixed and can be easily removed, as electric lamps, etc.

With regard to fixtures properly so-called, the ancient rule that they have become part of the freehold and are, therefore, not to be removed by the tenant, has been relaxed in the case of things fixed to the freehold for ornament or convenience. There are also felaxations in favour of trade or agricultural fixtures with which it is not necessary to deal here.

The class of ornamental or convenient fixtures which may be removed include fixtures which are really substitutes for movable furniture, affixed for a temporary purpose, and removable without injury to the premises, such as blinds, stoves, book cases, gas fittings, etc.

The removal or non-removal of fixtures and fittings is often made the subject of agreement. Sometimes the landlord has an option to take them at a valuation.

In concluding these remarks on the legal relation of landlord and tenant it can only be stated that the law on the subject is "extensive and peculiar" and that little can be said in a short space except to indicate the principal matters which the tenant should consider carefully. The words of each clause in a draft lease or agreement should be studied, and their exact

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legal effect should, if possible, be ascertained and borne in mind. Even an ordinary three years' agreement should not be signed without taking these precautions. Legal advice should be taken wherever possible when serious obligations are contemplated, before signing any document, even if only a letter, which may impose such obligations. Legal expenses incurred before the signature of a document are a better investment than those incurred subsequently, and it is hoped that the foregoing remarks will give some slight assistance to the layman in forming an idea as to the points on which he wants advice and in understanding such advice when he has obtained it.

CHAPTER V

HOUSE DECORATION

CHOICE OF PAINTS, VARNISH, STAINS, WHITEWASHING

It has been said that man is to a great extent what his surroundings make him, but it is also true that a man's domestic surroundings often reflect his own spirit, and in this respect man makes his own environment. Appearances and spirit act and react, and a less banal life will surely be induced by a general atmosphere of harmony produced by the form, colour, and line of the decorations in and around the house, while the aim of the home-maker should be to give sincere expression to his own personality.

While an air of comfort, repose and cheerfulness is maintained, the durability, utility and appropriateness of the ornamentation should not be lost sight of. Let all be in keeping with the construction of the house and with the needs and income of the family, and while seeking to be be autify, do not over decorate; good tasted mands simplicity and avoids pretentious

adornment. Too often the house decoration, interior as well as exterior, is decided by the landlord or his agent, but such matters as the choosing of paints, papers and stains can usually be controlled by the tenant. Notes of discord may not infrequently be traced to a lack of the appreciation of colour, or a general insensibility of the fitness of things. All have not the artist's eye, but more or less successful results are within the reach of those who, with the aid of observation, train the mind to select appropriate and harmenious combinations and agreeable con-

trasts.

How dittle understood is the effect of colours upon the health of the community, yet it is a well-known fact that while some promote gaiety and cheerfulness, others are most depressing. The value of colours as healing mediums is now recognized not only by the medical profession, but by the majority of the thinking public. Rooms with a north or north-east aspect will be more successful if treated with warm, bright colouring, while those looking south or southwest require cooler and more subdued tints. Violent contrasts and obtrusive designs, producing a feeling of unrest, should be avoided. For dark rooms, corners or passages, light walls are always preferable; the difference both in apparent size and pleasantness is sufficiently emphasized on comparing this treatment with a duller scheme of colouring.

Several rooms opening off a common hall or lobby should harmonize both with it and with each other, thereby making a complete whole, avoiding disagreeable contrasts, and giving an effect of spaciousness.

WHITEWASHING AND DISTEMPERING. One of the oldest and simplest methods of covering a surface of stone, brick or plaster, is whitewashing. Within the house it is sanitary, cheap and efficient for use upon ceilings of rooms, and for the walls of larders, while outside it may be employed for the interiors of sheds, barns, etc. For the latter, however, limewash, a similar preparation though more antiseptic, is more often met with.

For the preparation of Whitewash mix 3 lb. of whiting (carbonate of lime) into a stiff paste with cold water; dissolve ½ lb. of size, which can be obtained either in jelly or powder form, in a pint of boiling water, and add the mixture to the whiting; thin the whole to the consistency of a thick cream with cold water, when it will be ready for use. To make colour wash or distemper, dry colouring matter may be obtained in powder form at a reasonable price; a paste made of this with cold water should be added to the whitewash.

If a room has been previously papered or whitewashed, before applying the new coat, all old paper should be stripped from the walls, and the old whitewash carefully removed with water. Any holes or cracks in the walls or ceiling should be stopped with a mixture of two-thirds plaster of Paris and one-third whiting

moistened with water, and applied with a pallet knife which, if dipped constantly into cold water while in use, will be found to act more readily, the dampness preventing the plaster of Paris setting too quickly. A well-balanced brush, not too heavy, will be needed for the work, and a leather wristlet worn upon the wrist will strengthen it, and prevent tiredness. All new brushes require to be soaked in cold water for some hours prior to using, or the hairs will be found loose and liable to fall out.

Both whitewash and distemper must be applied evenly, and in one direction, viz., away from the operator. The brush should be plunged into the mixture up to half the length of the bristles, tapped lightly at the edge of the bucket, and passed as quickly as possible over the surface to be decorated, each stroke slightly overlapping the last made before this has thoroughly dried. Newspapers fastened upon the walls of a room whose ceiling is to be whitewashed will protect the paper from harm by the liquid.

To prepare limewash. Place the lime in a bucket, and stir in boiling water until it is a thick cream; prepare a solution of salt and sulphate of zinc with hot water, and add to the lime. Five to six ounces of salt and the same amount of sulphate of zinc will be required for 4 to 5 lb. of lime. Limewash is applied in the

same manner as whitewash.

Washable distemper, such as may be purchased in packets dry, or mixed ready for use in 7 lb. tins, dries quickly and hardens; to obviate

this, the bucket containing the mixture may be placed in a bath of boiling water, whose steam rising will keep the distemper smooth and liquid. Light shades are usually less costly than dark, and I lb. of dry distemper is sufficient for ten square yards of wall space. Distemper is washable three weeks after application. If the walls are discoloured, a lining paper should be first hung upon them, and the distemper applied to the paper.

PAINT. Paint is used for many purposes, and will adhere to almost every kind of ground or foundation. In the house, however, it is principally employed to preserve and adorn the woodwork, such as doors, window frames, panelled walls, skirtings, passages, and floors. Composite walls of rooms which require constant washing will be found more sanitary and less trouble if painted, although the initial outlay may be greater than if paper were used. When deciding upon the colour for the paint of a room, the rest of the decoration should always be borne in mind, and care should be taken to select something which will harmonize with the predominating tone in the wall-paper. The question of light, too, is one which demands some attention; pale tints with a glossy finish will greatly enhance the brightness of badly lighted rooms, reflecting whatever light enters, while a dull dark paint will absorb much of that which manages to find its way in through the windows. It is false economy to use cheap paint; only the

best gives a good result, requiring renewing less often, and withstanding wear and tear better than that of inferior quality.

Paint may be finished with a varnish, or with an enamel of the same shade, both methods giving a shiny appearance, but if so desired it

may be prepared with a dull surface.

Before paint is applied to an object, all dust and dirt should be removed and the surface rubbed with sandpaper; woofwork in the kitchen, scullery and bathroom should be scrubbed with strong soda and water, and rinsed with cold water to remove any traces of grease. Previously painted wood requires but two coats of paint, but new woodwork should be treated with three coats, the first being of a light shade and thinner in quality than the other two. The paint should be put on evenly and sparingly, and it is a good plan to use thin cardboard or tin to protect the floors and windows when painting skirting boards and window sashes or frames.

VARNISH. Varnish is formed from resinous substances and is of two leading kinds, spirit varnish, in which the dissolving agent is a spirit, and oil varnish, with which linseed oil and turpentine are employed. When used over paint it enhances the lustre and increases the durability. Before applying the varnish, allow the paint to become quite dry and hard; gently sandpaper and brush with a perfectly dry and clean brush, after which apply the mixture evenly and thinly

over the surface. A warm temperature is necessary

to good work.

Čare should be taken to select a varnish suitable for the paint; a light shade may be used for either a light or dark paint, but obviously a dark varnish would spoil a light tint. White paint is usually enamelled, a coat of varnish tending to alter the colour to a cream shade. Varnish bought ready for use should be kept properly corked or it will dry. Old paintwork which is to be varnished must first be washed, to remove all stains and grease, with warm soapy water, into which a few drops of ammonia have been put, then rinsed with cold water and dried.

Brushes used for paint or varnish should not be put into water, but cleaned with turpentine and thoroughly dried, before putting away.

STAINS. Water stain will be found the most satisfactory where the whole, floor of a room is to be coloured by this method, though where a carpet is also used, and merely a margin of the floor is to be stained, a varnish stain is easier of application and gives excellent results. Either of these may be procured ready for use at small cost, from 1s. 6d. per quart for the former, and 2s. 3d. per quart for the latter, larger quantities of course becoming cheaper in proportion; one quart will supply one coat of stain for a room whose floor measures ten feet by twelve feet. It is advisable to recollect that each coat of stain presents a darker appearance than the one beneath it, and therefore to avoid using too dark a

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tint for the first. Also, when applying varnish stain to new boards, it will be well to give a coat of size first, to prevent the liquid soaking into the wood too rapidly.

Floors must be made as level as possible, prior to staining; if necessary, planing should be the means of removing uneven parts; the boards must be free from nails, and well scrubbed with hot water and soda, containing no soap nor greasy substance of any kind. It cracks appear between the boards, these should be filled up with putty mixed with a little colouring matter toning with the shade of the stain to be used.

Method of application. Pour out a little of the stain into a jar, and with a soft brush, apply evenly, beginning with the boards farthest from

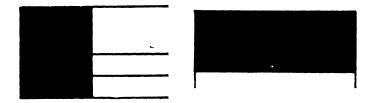


DIAGRAM 20.

- (a) WRONG METHOD OF APPLYING STAIN.
- (b) CORRECT METHOD OF APPLYING STAIN.

the door, and working with the grain of the wood. The full length of two or three boards should be finished before proceeding to the next, so that no lines indicating where the work may have been left off and continued at a later time,

may be distinguished. Leave the floor to dry for twenty-four hours, then rub thoroughly with a rag dipped into linseed oil, which will bring up the grain of the wood, and fix the stain, at the same time darkening the boards. Leave for another twenty-four hours, and polish with beeswax and turpentine to give a brilliant surface. A second coat of stain may be applied, if necessary, before the polishing process begins, as soon as the first coat is dry.

Home made stain may be prepared with 2 oz. of permanganate of potash crystals placed in a jar, and mixed with one pint of boiling water; a gentle heat should be maintained until all the crystals are dissolved. It may be stirred with a piece of wood, and the stain applied with a stick to which a pad of cloth is tied; brushes are useless for this stain, which will burn the bristles. A second useful stain may be obtained from equal quantities of Brunswick black and turpentine mixed in a jar, and applied with a brush evenly over the surface of the boards.

Beeswax and turpentine for the final polishing is made by shredding I oz. of beeswax into a jar, pouring over it one gill of turpentine (a teacupful), placing the jar in a saucepan of water, and allowing it to remain on the side of the stove until dissolved. Care must be observed in making this mixture not to stand the jar directly upon the stove, but in a saucepan, and not to leave the jar in the oven to melt the wax, since it may be forgotten, and the jar may crack and the turpentine ignite, causing serious accident.

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Apply beeswax and turpentine with a piece of soft flannel, and polish with a duster, or apply with one of the many "polishers," sold specially

for the purpose.

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Specks of stain may be removed from the skirting boards or elsewhere and brushes may also be cleaned with methylated spirit. Gloves will protect the hands during staining operations, although methylated spirit will remedy the disfigurement should they become soiled.

CHAPTER VI

WALLPAPERS, PAPERHANGING

PAPER wall hangings were introduced in the sixteenth century into Europe from the East by way of Holland, whose shipping trade at the period was very vast. In the seventeenth century they were adopted in England, many householders sending dimensions of rooms out to China, and procuring hand-painted hangings on rice paper specially for themselves; later, walls were decorated with handmade paper upon which designs were painted, repeating in lengths, and these gave place to machine-made papers with a continuous pattern similar to those now used. Many of the old flock papers, hung in the Georgian times, are still extant, but, owing to the rough surface, these were not so serviceable as the smooth papers, as they afforded traps for dust, dirt and infection, which were not so readily dealt with then as at the present day. With the cheapening of machine-made papers, wall hangings became poor both in quality and

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design, although their low price at once brought them within the reach of every householder; it is encouraging, however, to note that during recent years public taste has demanded better colouring and patterns, and artistic papers in almost every quality at every price may now be obtained for all purposes. The fashion for painting walls, panelling them with wood, and employing other methods of decoration has, perhaps, somewhat usurped the use of wall papers, but for general purposes they are still considered the cheapest form of covering, and beautiful effects may be produced with them. They may be easily kept clean, and when laded or discoloured are renewable at small cost.

The selection of a wall-paper is a matter of individual taste, but a few general rules may serve as a guide in choosing something suitable for the wall space it is intended to adorn. The location, size and shape of the room must be taken into account, and light is a highly important question.

Papers with a warm tint in the background should be selected for a room with a cold aspect, for greys, drabs, blues and browns will add to the natural cheerlessness; for sunny rooms a pale, cool looking paper is desirable; sanitary washing papers are the most suitable for nurseries and staircases, while a varnished surface is the best for kitchens, lavatories and bathrooms. Papers unobtrusive in colour and design are the most restful, and for bedrooms small trailing designs or plain papers are desirable,

the latter affording a good background for pictures. In a small room, a light paper will add to its apparent size, while stripes will emphasize the height where the ceiling is low.

Care should be exercised in the use of friezes and borders. Where the room is lofty, these may be fairly deep, and the picture rails fixed below, but for a low pitched room friezes are unsuitable, and the picture mouldings should be placed close up to the ceiling, to avoid giving a squat appearance. Glaring contrasts of colour and "spotty" designs are both irritating and in bad taste.

Papered ceilings should be kept as light as possible, and the patterns chosen should be self-coloured, indefinite and conventional. Ceilings may also be treated with anaglipta, a kind of paper specially made to imitate plaster work, the designs usually following the lines laid down by Adams and other eminent decorators.

Unless guaranteed free from arsenic, wall-papers are injurious to health; it is a fallacy to suppose that green papers alone may contain this poison, it is traceable in other colours also. To test a suspected paper, burn a small piece, and if arsenic is present it will give off a smell similar to that of garlic.

CALCULATION. Wall-paper is procurable by the piece, which is usually twelve yards long and twenty-one inches wide, or seven square yards in each piece, French papers being slightly narrower. To ascertain the amount required to

cover a room, take the dimensions in feet round the room, and from ceiling to floor. Multiply the two results together to learn the area in square feet, and divide the whole by nine, reducing it to yards; divide the number of yards by seven, and the result will show the number of pieces of paper required, seven square yards being the area of each piece.

Example: A room of fifty-eight feet round and twelve feet high requires eleven and $\frac{1}{2}$ pieces of paper, therefore twelve pieces should be bought. The working of the calculation as above will appear thus:—

$$58 \times 12 \div 9 \div 7 = \frac{58 \times 12^4}{\theta_3 \times 7} = \frac{232}{21} = 11_{2^{1_1}} \text{ pfeces.}$$

HANGING. All old papers should be stripped off the wall before the new is fixed, by thoroughly wetting it with warm water, and leaving it for a short time, after which it may be easily scraped away and burned. The removal of the old paper provides a smooth, flat surface upon which to hang the new, besides doing away with any possibility of harbouring dust, dirt, infection or insects beneath it. A first coating of size prevents the absorption of too much paste, and allows the paper to adhere readily.

A good paste may be prepared by mixing 2 lb. of flour to a cream with cold water, adding 2 oz. of powdered alum, and boiling the mixture for five minutes, stirring all the time to prevent the formation of lumps which would hinder the

paper from lying flat. Paste which is not well cooked becomes mouldy, and causes an unpleasant smell in the room; alum acts as a preservative and also allows the paste to work more freely on the brush.

Having provided a table upon which to work (preferably a narrow one with trestles) the paperhanging may be proceeded with. Trim off the edges of the paper and cut it into suitable lengths for the height of the room, taking care that the patterns on each length shall correspond with those on either side when hung. Place the lengths one on the top of the other, face downwards on the table, and paste the uppermost length evenly all over, folding the ends towards the middle so that the wet paper may be more easily mandled. Two or three minutes should elapse before hanging a thick paper, to allow time for the paste to soak in, and for the expansion of the paper which otherwise will cause wrinkles, but a cheap thin paper must be hung as rapidly as possible after pasting, or it is liable to tear. With a plumb-rule find a perpendicular part of the wall to start from, and working away from the light, beginning preferably at the righthand side of the window, hang the pieces side by side round the room till the window is reached again, starting each piece at the top of the room, and carefully fitting so that no gaps be left between the pieces of paper.

While placing the paper upon the wall, avoid wrinkles by gentle pressure downwards, and from side to side, with a clean duster or brush,

taking care not to rub the surface or allow the

paste to appear on the right side.

Roll up and carefully preserve all pieces of paper left after the room is finished; they may be useful for renovating in the future.

Damp walls may be treated with a coating of specially made size, which will prevent stains 'appearing upon the new paper, or may have an under paper, pitch lined, and put on with a strong paste.

To remove the smell of paint and papering place a pail of cold water in the room for twelve to twenty-four hours. New hay put in the water

renders it more effectual.

CHAPTER VII

CARPETS, CURTAINS, FURNITURE, & DECORATIONS

"WITH what shall we cover the floors," is the foremost question in the mind, as soon as the papering and painting of the house are finished. Carpets, although the most popular, and generally the warmest form of floor furniture, are considered by many to be not the most hygienic, and it is increasingly fashionable to adopt the use of rugs, with stained or polished floors, and sometimes with linoleum.

CARPETS. Carpets, which have been used from time immemorial in the East for many purposes, first made their way into Europe in the Middle Ages, and a factory was established in France in the reign of Henry IV, a further one being set up in England, at Mortlake, in the time of James I. Various classes of carpets are obtainable, manufactured in all parts of the world, but among the best known are the Brussels,

Axminster, Kidderminster, Wilton, Venetian, Turkish, Irish and Persian; in modern times the production has been greatly improved, and the cost modified with the aid of ingenious machinery. Brussels and tapestry carpets are made with a short uncut pile; Wilton, Axminster, Irish, etc., with a deep cut pile; Kidderminster and modern art squares with no pile at all. Of the first two named, Brussels is the best for hard wear, the colours showing through to the back, and the loops, which are 5-ply, being formed by passing the wool through canvas over wires, in a manner similar to that employed in the manufacture of tapestry carpets, whose loops are only 3-ply, and whose colours do not appear at the back. Many qualities of these are procurable from 3s. 6d. per yard upwards, and twenty-seven inches wide.

Axminster and Wilton carpets, whose prices range from 5s. per yard upwards, have a velvety appearance, the wires over which the wool is woven being flat, and provided with a groove on the upper surface, along which knives are drawn cutting the material and liberating the wires, as the carpet is completed. This type of carpet is also woven in squares without seams.

Turkey, Persian, Indian and Irish carpets of good quality are hand-made, in one piece, and vary in price according to design, material and size; machine-made imitations, however, may be obtained at almost any price desired, and in a great number of designs and colourings.

Colourings which are restful and harmonize

with the other decoration of the room should be selected, the size of designs of course being in proportion to the size of the room; plain coloured carpets are frequently successful, affording a good background for furniture, but marks and spots will be more apparent than upon figured carpet. Squares which can be turned about to equalize the wear, are economical, and carpets with a suitable border, although slightly more expensive than those without, are pleasant to the eye. Carpets which are harsh or hard to the touch should be avoided.

Rooms with a "surrourd" of polished boards, parquet, or other substances, beyond the edge of the carpet, are healthy and convenient, since the floor covering may be taken up for cleaning of tener and more easily.

• Before proceeding to lay a carpet, care should be taken to see that the floor is perfectly clean, dry, free from nails, and even; where the boards have shrunk, apart the crevices should be filled in with putty, tow, or a special caulking material such as is used on board ship. An under carpet should first be laid, which may be of felt costing about is. 6d. per yard, or of carpet paper costing as little as 21d. per yard; this will lengthen the life of the carpet, and render it softer to the tread. Over this the carpet should be laid evenly, stretched well, secured by the top and bottom first, after which the sides should receive attention; a sufficient number of tacks will be needed, but too many should be avoided.

STAIR CARPETS. When buying carpet for the stairs, an extra half-yard should be allowed, in order to permit of its being moved a few inches from its former position when relaying, thus preventing the tread from remaining always in the same place; pads also should be laid under the carpet to soften the tread, deaden the sound, and retard the wearing out of the fabric.

MATTING. For kitchens, back stairs, prssages, etc., mattings of various kinds are frequently employed, being more readily removed for cleaning, and more easily kept free from dirt; cocoanut fibre, jute, Indian and Japanese mattings are among the best known.

LINOLEUM. One of the most popular floorcoverings is a mixture of powdered cork and linseed oil, pressed together and affixed to a canvas foundation. Plain or printed with a design, and obtainable in almost every colour, linoleum forms a durable and hygienic covering for the floors of kitchens, passages, bed and other rooms, and when used in conjunction with rugs, artistic, harmonious effects may be produced with its aid. It is well to note that the colour continues through the entire thickness of the linoleum, or after a short time the surface may present a patchy appearance. The prices vary with quality, design and width, but linoleums are manufactured at almost every price from about 2s. to 4s. per square yard; Kamptulicon, which is somewhat more expensive, is made from gutta-percha and cork, and is soft to the tread, and gives greater warmth to the room.

MEASUREMENTS. To determine how many yards will be required for a carpet, take the measurement of the width to be covered in inches, and divide the result by the width of the carpet to ascertain the number of widths necessary; then multiply the number of widths with the length of the room, measured in yards.

Example: A carpet 9 feet or 108 inches wide by 15 feet or 5 yards long 108 ÷ 27 (width of carpet used)—4 widths required = 4 × 5 (length

of room) = 20 yards of carpet.

Extra length should be allowed for matching the design when joining the widths together; $\mathbf{1}_{2}^{1}$ to 2 yards will be found sufficient with small designs, but more should be allowed in proportion for large patterns.

CURTAINS AND BLINDS. The selection of decorative window furniture, which, while ensuring privacy, preventing draughts, and enhancing a feeling of cheerfulness and comfort in a room, does not exclude light and air nor interrupt the viewing of objects of interest outside, is a subject which demands considerable attention when arranging the house. The colouring of curtains and blinds must, of course, harmonize with the general scheme of decoration in the room, the object being to add to the agreeable effect, and to soften the hard lines of

the window frames, while not giving undue prominence to the window furniture itself.

The fabrics and styles of curtains will largely depend upon the use to which the room is to be put, and upon the shape of the windows. Very heavy materials, such as velvet, thick brocade, and tapestry, which would be out of place and oppressive in bedrooms or when hung at small windows, will be found quite suitable for large windows in dining-rooms, libraries, reception rooms and so forth. For bedrooms and nurseries may be chosen some of the soft silks, reps, poplins or casement cloths of which innumerable varieties are obtainable, those which are easily washed or cleaned being the more economical. Second curtains of lace, net, or muslin relieve the bareness of the window frames, particularly where the heavier curtains are of dark colour and severe in character. Curtains may be hung in many ways, and where cornice poles and rings are not fixed, the simple method of suspending them straightly from a brass rod, with or without the addition of a palmette or overhanging, is perhaps the most serviceable; casement curtains reaching to the sill only, when hung in this way, are hygienic as well as decorative.

Sash curtains for bathrooms, lavatories and other places, where the windows are constantly thrown open, will be found more convenient if fastened to the frame upon thin brass rods.

The main points to bear in mind when hanging the curtains is, that while fixing them securely, they may be easily removable, and readily

caught back to admit light and air.

Blinds of a firm and suitable texture, fitted with rollers and automatic catches, and fixed closely into the window, are the most popular for general purposes, and if a plain, dignified pattern be selected, it will be found cleaner, more useful and lasting than the more elaborate and belaced designs. Where Venetian blinds are used, care should be taken to ensure their being fitted with pulleys and cords of good quality, or much annoyance will be caused by broken cords, or blinds which cannot be raised or lowered straightly.

CUSHIONS. Every room should be supplied with confortable cushions of artistic appearance, those of oblong and square shapes being the most desirable. Indeed, soft cushions are almost indispensable to the comfort of the majority of sofas and easy chairs, and when toning with the general colour scheme of the room, will form useful additions to its decoration.

The fillings may be of down or feathers, vegetable down being frequently substituted for the softer variety; this, however, has a tendency to become lumpy, although if placed in a warm oven for a short time, and well shaken and beaten the lumps will disappear.

A first covering of swansdown calico, through which feathers will not penetrate, should encase the filling, over which an outside cover of almost any kind of material may be placed. Washing materials, or fabrics which may be readily cleaned are the healthiest and require renewing less often than those of a more fragile nature. For embroidered cushions it is well to choose designs which are complete in themselves and not apparently parts of a larger work of art, while of such a character that they may be used in any position. The materials should be selected with a view to their being able to stand the test of cleaning. Leather and chamois leather are best suited to the library and smoking-room; silks, tapestry, brocades for the drawing-room; muslin, cretonnes for the bedroom; and washing material for the garden.

FURNITURE. The important task of famishing, depending so largely upon the amount of money available for the purpose and the individual taste of the purchaser, cannot be controlled by any hard and fast rules as regards style, quantity, or even quality. Certain articles, however, are necessary in every household, and a few general observations may be useful in assisting the purchaser to procure that which is at once durable and ornamental. Utility, simplicity of design and decoration, with excellence of finish, mark the best furniture of the best periods, and although all are not fortunate enough to possess heirlooms, nor able to buy genuine antiques, good modern pieces are reproduced upon the same lines, at almost every price.

The silent influence of the furniture of the

home upon the life of the family will be readily understood, and it will be admitted that it is highly important that children and young people during the period of character-forming should be provided with harmonious and restful surroundings, the early impressions being those which play the greatest part in later years, and remain the longest in mind Before setting out upon-2 shopping expedition it is necessary to form some idea of the kind of furniture required, how much may reasonably be spent, and what articles are indispensable to each room. In the case of the more modest households, the "first furffishing" is frequently the only one possible for many years, subsequent housekeeping absorbing the principal part of the family's resources, so that it is found difficult to replace badly constructed and useless articles. It is obvious, then, that to render the purchases a good investment, only those things which are necessary and of as good quality as possible should be entertained; the selection should be compatible with comfort and harmony, and the furniture appropriate for the use to which it is put, the size being in proportion to the room for which it is intended. A due regard to saving of labour should be observed and articles should be chosen which are readily removable and easily cleaned. Well seasoned wood is a necessity in furniture making, or the cupboards and drawers will warp, opening and shutting with difficulty, and cracks will appear after a very short time. Cheap, showy suites should be avoided:

the varnish speedily wears off and the wood shrinks. The easy payment system is not to be recommended, since ready money will purchase better furniture for the same price; moreover, goods bought upon the instalment plan cannot be looked upon as possessions until all payments have been met; should arrears occur, the seller ay lay claim to the whole.

Second-hand furniture is frequently a good investment, but care must be taken to examine it thoroughly before buying. Any trace of "dry rot" or worm should be eradicated, or it will spread to other goods, and upholstered chairs, sofar etc., should be well cleaned and disinfected. If possible, it is better to select second-hand articles before they are restored; the condition may then be estimated, the bruises and damages so often skilfully hidden by the "doing-up" process being open to view.

THE HALL. This usually represents to a great extent the ideals and aims of the home-maker, and may be taken as the keynote of the house. The narrow hall is fast disappearing from modern architecture, to be replaced by the square hall with fireplace and stairs arranged to lend charm and comfort for the benefit of residents, and give a cheerful, orderly sense of welcome to visitors. A linoleum or polished floor with suitable mats is conducive to cleanliness; carpet or corridor matting will deaden sounds, and produce a feeling of restfulness through the house. Superfluous furniture in a hall is to be

avoided; a table with drawers, a cupboard in which to hang coats, a hat rack and umbrella stand, two chairs or a settle, and sometimes a clock are all that are generally necessary; a mirror conveniently placed, a few pictures, trophies or armour may be used for wall decorations, should space permit; heavy, dust-catching curtains, which will obstruct the light, should not be used. A good mat at the entrance is a necessity.

THE STAIRCASE. Stair carpet, being subjected to a great deal of wear, should be of good quality and laid over stair pads, the colour harmonizing with the hall decorations. Brass stair rods are the most popular, but many, other varieties, including, wood, copper and oxidized metal, may be obtained, if desired, of a thickness to suit individual requirements; the broad patterns are perhaps more effective, although more expensive than the thin round rods. They must be fixed by some safe method, to prevent their coming adrift from the stair, and causing accident. Suitable mats placed at the entrances of the various rooms add to the artistic effect upon a staircase, as well as aid in keeping out draughts and dust which may find ingress beneath the door.

BEDROOMS. First and foremost the bedroom is intended to be a place of rest; indeed, as a general rule a third of the twenty-four hours of the day is spent in bed. The furnishings, there-

fore, ought to be selected with a view to comfort, restfulness, and utility, all superfluous articles being discarded and sufficient space left in which to conveniently move about.

The bed itself will claim the first attention, and it is highly important to health that this should be comfortable and sanitary. Wire springs with hair mattress of good quality, and soft pillows are the best and most economical in the long run; it is unwise to choose cheap bedding which will require renewing in a very short time, and will never give any degree of comfort. Wooden bedsteads, if kept clean, are not unhearthy, although metal ones of a simple design are preferable; valances and bed hangings, if used, should be as light as possible, and of a kind which may be readily laundered.

A washstand with dainty but useful toilet ware, including pail and bottle and glass, a pedestal, a dressing table fitted with a good looking-glass, a couple of small chairs, a chest of drawers, and a wardrobe or cupboard accommodation for the proper storage of clothes are necessities. Where the size of the room permits, an easy chair or couch, a table for writing or working and a convenient case for a few choice books. add to the comfort; in visitors' rooms a trunk stand is always a useful adjunct. The floor may be covered with linoleum or may be stained and polished, and overlaid with warm rugs, but if a carpet be preferred, it is wise to choose something which is easily removable for cleaning. The walls may be painted or papered with bright.

restful colourings, and a few well-chosen pictures, with a long mirror hung in a good light will be appreciated. The windows will require blinds and curtains of sufficient thickness to darken the room if necessary, but not so heavy as to exclude the life-giving air which must be allowed free access.

Fixtures for artificial light should be placed conveniently for the dressing table, and with due regard to the pursuits of the occupant of the room. A small number of artistic ornaments add to the cheerfulness of a room, but beware of a superfluity of knick-knacks which merely harbour the dust.

In selecting the place for the bedstead, it is well to avoid putting the head to face the full glare of light from the window, also, in view of the earth's magnetic currents passing from east to west, many people find a difficulty in sleeping when the bed is placed lengthways between west and east, but will be perfectly comfortable with the head in the north.

DRESSING-ROOMS. These are usually furnished to accord with the bedrooms to which they are attached, and a gentleman's wardrobe, washstand and shaving mirror should form part of the equipment

THE DINING-ROOM. Cheerfulness and simplicity should be the dominant notes in this room. Wall-paper, chosen in accordance with the aspect of the room, either plain or of dignified pattern,

will look well, and the wall space may be broken up by a few choice pictures of general interest, suitably framed. Do not hang oil paintings with engravings: if possible, the pictures should be either all oil paintings or all engravings. A good pile carpet, and curtains of reasonable thickness, of velvet, tapestry, rep or similar materials, will present a luxurious appearance, but a flooring of wood or cork carpet with removable rugs is frequently considered more hygienic.

The dining table, chairs and sideboard should be built on simple useful lines, strong and comfortable, so designed as to allow of both themselves and the room being easily cleaned, the chairs being arranged to move smoothly over the carpet, and the table legs being conveniently

high to allow space for the knees of diners.

Plenty of room to allow of free movement by servants when waiting should be one of the first considerations, but where the dining room is also used as a morning room, a couple of easy chairs, a writing desk, and possibly a Chesterfield, will be deemed necessaries.

The fender, fireirons and coal vase should be of good quality and pattern, and the ornaments few in number, although plants and candelabra may be attractive in the room.

If no centre light be fixed, side lights from the walls, used in conjunction with candles or electric light upon the table, are very effective.

BREAKFAST OR MORNING ROOM. In this frequently much-used room, somewhat the same

principles should be applied as in furnishing the dining-room, although the furniture may be of lighter make. Where the house is not equipped with a library, this room is often made to serve for reading and study, and the chairs, desks, etc. should be selected accordingly. In this room, also, avoid any excess of furniture, ornaments and hangings.

THE LIBRARY OR SMOKING ROOM. Paintwork and paper of useful tones, a thick carpet with suitable curtains, comfortable and serviceable chairs, table, desk with drawers, or rolled-top desk, and sofa, placed in a good light, also bookcases designed with a view to the proper care of books, comprise the principal furniture of this room. Good artificial light fittings, situated so that it is possible to read in any part of the room, and sensible fire utensils are necessities. A fender of the pattern known as the "Club Curb" may be considered a pleasant addition; this is about two feet in height, surmounted with seats at the sides, and is upholstered in leather.

Ornaments should be sparingly used, but a smoker's companion must be given a place. For wall decoration a few good paintings or prints will be found sufficient as a general rule.

DRAWING AND RECEPTION ROOMS. Here, more than in any other room, perhaps, the individual taste of the mistress of the house finds scope, so that it is impossible to lay down any

particular rules as to colouring or style of furniture. Usually a light wall paper, with harmonious paint, carpet, and curtains giving a general air of artistic comfort and cheerfulness, will be found successful. Since these are the rooms in which visitors are received, plenty of seating accommodation should be provided, and all chairs, sofas or settees, large and small, high or low, should be chosen with a view to conflort and strength. A window seat may be thought desirable if the window be of suitable shape and size to permit of one. Avoid useless ornamentation, and choose pictures of suitable subjects in frames of light make; watercolours or Japanese prints look well; China ornaments, lamps and other decorations should be in harmony with the rest of the room, in good taste and not too numerous.

Loose chair covers of chintz or cretonne present a cool, refreshing appearance in summertime, and are easily cleaned. Plants and flowers are always pleasant, while a piano and stool in a good position are almost indispensable items. The grate and fireplace furniture, or stove, should be designed for use as well as for ornament and a few interesting books in a small bookcase will be found a happy addition to the general equipment. The artificial light should be conveniently placed and artistically shaded. Above all, let a feeling of homelike welcome prevail; there is nothing more chilling than the orderly smartness of a room obviously but little used.

THE HUSBAND'S DEN. Where the house does not possess a library, a room well away from the kitchen or nursery should be set aside for the exclusive use of the father of the family where he may follow his particular hobbies and pursuits in peace and quietness, without fear of disturbance by the children or the rest of the family. If he has a favourite colour scheme, adopt it, and provide everything possible for his comfort and use, but avoid any superfluous furniture or adornment, and be sure that a good light is conveniently placed for reading, writing or other work. Let the occupier of the room dispose of his belongings in his own way and do not unnecessarily displace them when "tidying up"

THE NURSERIES AND SCHOOLROOM. Nothing is more essential than the health of the children and young people of the family; too much care, therefore, cannot be exercised in selecting and furnishing the nurseries. The ideal nursery has a southerly or south-westerly aspect, not too near the top of the house to be exposed to extremes of heat and cold, nor near enough to the basement to be dark and depressing, but a large, lofty, spacious, cheerful room situated in a quiet part, away from the kitchens and lavatories. The windows must be built to open at top and bottom, admitting plenty of light and air, while keeping out injurious draughts; they should be supplied with iron safety bars across the lower half. Walls covered with sanitary paint or paper of cheerful colour and design, floor of Indian

matting or cork carpet with movable mats, washable curtains of bright refreshing appearance, and furniture simple, strong and easily cleaned, will be the principal requirements. Among the necessaries may be included an easy chair for the nurse, a sofa, nurse's cupboard, fitted with a lock for requisites and medicines, the toy cupboard, bookshelf, baby's chair, and small chairs for the other children, a strong nursery table; and a fireplace provided with all requisites and an efficient guard. The artificial light fittings must be placed in safe positions, away from the reach of small fingers. Everything should be chosen with a view to promoting cheerfulness, happiness and tranquillity, early surroundings playing a very large part in the building of the subsequent character, and above all the young mind should not be worried and perplexed with over-adornment and too many items of furniture in the nurseries. With the night nursery the same principles hold good with regard to aspect, ventilation and furnishing, the beds and bedding here, of course, claiming primary attention. A separate bed or cot for each child. with comfortable and light, though warm, bedding should be provided, together with a bed for the nurse, chairs, dressing table, chests of drawers, washstands, wardrobe or large hanging cupboard, and a screen to keep away draughts. The pictures selected should be cheerful and interesting to children; they will be remembered years afterwards, and should therefore be not inartistic. A thermometer will indicate the temperature of the room, which ought to be kept evenly between 60 to 65 degrees Fahrenheit. Each child should be equipped with its own toilet requisites, and privacy allowed as far as may be convenient. A cuckoo clock will be popular; and a weather-box from which the "little man" emerges in wet weather will impart the earliest lesson in chivalry.

THE BATHROOM AND LAVATORIES. Apart from the bath, hand basin, and other like fitments, very little is required in the bathroom, although a chair, mirror, comfortable mat or rug, set of hooks, towel horse, and linen basket are all useful. The walls may be painted or covered with a varnished, washable paper, and the floor should be tiled, painted, polished, or furnished with linoleum. Curtains of materials easily laundered will be found more useful if fixed to the window frames on brass rods.

The lavatories may be similarly equipped as regards the decoration; towel rail, hooks for cloths, and toilet paper fitment being also necessaries.

THE KITCHEN AND SCULLERY. Upon a properly equipped kitchen depends much of the comfort and good health of the family; above all it should be airy, light, cheerful and absolutely clean. A varnished paper or paint for the walls and a linoleum for the floor, with the addition of a rug near the hearth, will be found the best and simplest in the average home; a stone floor may

be covered with matting, but care must be taken that this is frequently taken up, shaken and cleaned, and the floor underneath washed and perfectly dry, before it is replaced. The deal table, chairs, dresser, and clothes horse, as well as all other fitments, should be washable, and planned with a view to saving labour and energy. Good lights near the stove and sink, a convenient stool, a good clock, and plenty of cupboards are essential. Comfort for the worker, saving of time and unnecessary labour, cleanliness, and economy should be borne in mind when selecting the kitchen requisites. Hangings are out of place in the kitchen, and if curtains are used, they should be of light washable materials, and should be made short to reach the sill only. To have all utensils conveniently to hand, and provision made to protect them from dust and dirt, is highly essential, and adds considerably to the good temper, happiness and punctuality in the kitchen department.

As much care should be observed with the colour schemes, harmony and suitable furnishing of this part of the house as with the drawing-room or any other part.

In the scullery the plumbing and sink arrangements must be unquestionable, and cleanliness being here again the first essential, tiled flooring and painted or varnished walls will be the most easily kept clean. Plate racks, draining boards, a deal table, a useful stool and a chair, as well as a small range and a fixed copper are practically all there is enough space for in the ordinary

scullery, with the addition of a wooden mat raised above the floor level in front of the sink, which will both rest the feet and keep them dry should any water be spilled on the tiles.

Having dealt with the several rooms, a few general remarks may be made with regard to

ceilings, doors, floors, and windows.

CEILINGS, which may be whitewashed, painted or papered, are usually constructed of plaster, or wood, and are plain, panelled or carved if of wood, and plain or moulded if of plaster. Plain ceilings are the best for low rooms, and even in the case of a lofty one, over-decoration should be guarded against.

FLOORS of oak, pine, or pitch pine, laid in planks or parquetry, should be constructed of well-seasoned wood or the planks will shrink apart. Bricks, tiles or flags may be employed for the floors of the hall, kitchen and scullery.

DOORS of well-seasoned wood, carved, panelled or inlaid, in proportion twice as high as they are wide, should be hung to open inwards into the room, screening part of the room when opened. They should fit closely to the frames, and the bottoms allowed to just escape the floor, or a draught will be created by the space left. The locks, handles and hinges should be of good quality and easily workable; suitable finger-plates also add to the neat appearance of the door.

WINDOWS should be of a size in proportion to the room; at least one-tenth of the wall space should be allotted to windows. They should be made of wood already shrunk to its fullest extent or the frames will warp in a short time. Facility in opening and shutting is the great essential, and whether of sash form, hinged or of other pattern, the locks, bolts and fastenings should be effectual and neat looking.

French windows and bay or oriel windows are decorative, as also are deep sills with some styles of architecture. Small panes of glass, fitted into suitable frames, are attractive, but the numerous corners render them difficult to clean.

CHAPTER VIII

REMOVALS AND SETTLING IN THE NEW HOUSE

NOTES ON PACKING; GETTING READY FOR THE VANS, ETC.

WITH what dread is a removal too often anticipated by the adult members of the family, and what a period of upheaval and discomfort is too frequently created, both before leaving the old house and for some time after taking up residence in the new. The annoyance, bad temper, and, indeed, indifferent health, resulting from the confusion and disorder, may easily be obviated in ordinary circumstances by a little good management and forethought. Unless the mistress of the house can place the whole affair in the hands of some duly qualified person, she should superintend matters herself, and it is necessary that she should methodically arrange her plans beforehand, so that no time may be lost in carrying them out. Wherever possible, see that all in the new house is ready

for habitation, a reasonable time before the day fixed for the "move," and do not wait until the last minute before engaging the vans and work-people; removals usually taking place on or about a quarter-day, it may be difficult to secure proper assistance unless the demand is made in advance.

PACKING AND PREPARING TO MOVE. Rubbish should never be taken into new home; the contents of boxes and drawers must be looked over and all that is useless discarded, the remainder being repacked tightly and covered with strong paper to keep out the damp or dust, and to prevent the articles from falling out. All cupboards must be treated in the same way, and all necessary contents packed into boxes or tied up for convenient cartage to the new address. Ornaments, china, glass, pictures and furniture should be thoroughly washed or cleaned so that when moved they will need only an additional rubbing and dusting. Curtains, chair covers, cushions and hangings should all be laundered, cleaned and made ready for use; carpets should be beaten and any alterations required in accordance with the measurements of the new rooms should be attended to beforehand. It is advisable to leave the actual packing of china, glass, books and furniture to the van men, they being specially trained for the work, and, moreover, the responsibility of breakages will then rest with the firm whose workpeople are employed; should, however, professional help not be available, it is well to remember that straw forms the best packing material for glass and china, fitting more closely and preventing jarring of the pieces more effectually than paper, and the more tightly the goods are packed the less likely is a breakage to occur. Furniture needs to be closely packed in the van, with all delicate legs, polished surfaces, etc., well protected with straw or hessian; while clothing should be folded as flat as possible, tightly packed with layers of soft paper between the folds—bows, sleeves, and puffings being stuffed with soft paper to prevent creasing.

Having arranged for the vans to arrive early upon the day of removal, be sure to have all ready for the men to commence work immediately. The beds and bedding, tied up and labelled so that they may be easily traced for their correct rooms, should be the last of the furniture to be placed in the van, to ensure their being the first to be unpacked, and ready to prepare for

the night.

WHAT TO DO BEFORE THE VANS ARRIVE.

At the new address, the painters and decorators should have completed their operations, the floors should have been scrubbed and the grates polished by a reliable charwoman, and the windows cleaned prior to the day of occupation. The surrounds and parts of the rooms requiring stain or polish should be made ready for use; to have the carpets and linoleum laid before the moving of the furniture will save a great

deal of trouble and time, paper or dust sheets being utilized to protect them from damage while the men are walking about; while blinds and curtains affixed to the windows will give immediate privacy and enliven the appearance of the house.

Provision of gas or electric light and water should have been previously arranged for, and all the fittings tested to ensure their easy manipulation.

Before the vans arrive it is essential to have made definite plans regarding the furnishing of each room, so that a capable director may superintend the unloading, and instruct the men where to place each piece of furniture; much confusion and subsequent shifting articles from room to room may be avoided in this way. Those things for which no final place has been chosen may be placed temporarily in a spare room until they can be sorted, but on no account allow the kitchen to be lumbered with all and sundry goods, thus rendering it difficult for the cook to proceed with her work.

Do not forget to furnish the men with the correct name of the house, street and locality, and if possible obtain knowledge of the shortest route thereto, so that no delay may occur during the transit of the furniture through the inability of the men to find their destination; nothing is more irritating than to have to wait in an empty house half the day for the vans to appear.

In a recently-built house, or in one that has

been unoccupied for some time, it is advisable to get fires lit each morning for two or three days ere coming in to it; in any case fires lighted on the day of arrival will give a sense of cheerful welcome, particularly if the weather be inclement; arrangements may be made for matters of this kind with a local charwoman, or a servant may be sent on prior to the arrival of the rest of the family.

To get the sleeping rooms ready for use, beds put up and made, a sitting-room fairly comfortable and the kitchen in a fit condition to cook the meals in, is about all that can be accomplished on the first day; sweeping the carpets, cleaning linoleum, and arranging the furniture in its place, together with laying the staircarpets, hanging pictures, disposing of china, glass and books, and generally clearing up the floor space, may be carried out during the following days. If the work be done methodically, three or four days should suffice for moving and getting everything into its place.

FOOD FOR THE DAY. This question should be planned before the actual day of removal and proper provision made for all members of the party. Invitations for lunch and dinner are frequently extended to the family by neighbours or friends on these occasions, but the servants and workers must not be forgotten. A substantial breakfast should be disposed of early in the day, so that all may be cleared away and packed up ere the vans arrive.

For luncheon cold refreshments may be prepared beforehand, which may be partaken of either in the old house while the men are absent at their dinner, or packed in a basket together with sufficient plates, knives, forks, glasses, etc., to be sent with the first arrivals to the new home; a tea hamper may likewise be prepared, and, if carried by the furniture van, care should be taken that the provisions are placed where they may be easily found when required, without necessitating the unpacking of the whole van.

Notification should be given to a dairyman and baker in the new locality to deliver milk, bread and so forth, as soon as some one has reached the house; a great deal of trouble may be saved if these matters are satisfactorily arranged prior to the moving. Where good restaurants are in the near vicinity it is always less trouble to take meals at one of these on the day of removal. Do not forget to see that light refreshment is provided for the men; either have it in the house for them, or see that they receive the means to obtain it; a little thoughtful courtesy of this nature will generally ensure willing service being given, and will render the task less arduous to the workpeople.

"CLEARING UP." The careful housewife will see that the vacated house is left in good order, ordinary wear and tear, of course, being excepted.

When the furniture has gone, the house should be swept throughout, and all dust 'thrown into the dust bin; empty boxes, rubbish and useless articles placed neatly together in some convenient spot for the dustman to remove, all useful goods not required by the family having been previously disposed of. The fire-grates should be left free of all ashes, the water taps turned off, and the cistern covered.

Gas, electric light and water should be turned off at the main taps, although in the former cases it is better to notify the companies to remove the meters as soon as they are finished with, and a responsible person will do well to see this accomplished before the house is finally left empty.

Note that all windows are closed and fastened, keys in their respective locks, and the back entrances properly secured against intruders; then, after seeing that all is tidy, and the front door shut after the last person out, return the keys to the landlord tied together and suitably labelled.

One other item of importance worthy of mention is the necessity of advising the postal authorities of the correct address to which letters, parcels and circulars should be directed; very much trouble, annoyance, and delay are often the result of neglect to attend to this duty. Such a notice holds good for a year, after which a small payment has to be made if the postal authorities are still required to forward on letters, etc.

CHAPTER IX

CATERING

TRADESPEOPLE; CHOICE OF FOOD; THE LARDER AND STOREROOM

To keep as good a table as the circumstances in life may fairly warrant is, perhaps, the predominant desire of most good housewives; at the same time it should not be lost sight of that plain living promotes the best health in the household, and an over-abundance of luxury, one of the worst forms of waste, is injurious both morally, mentally and physically. "Plain living" does not necessarily mean uninteresting nor even cheap food, indeed, it is a well-known fact that true economy is served by purchasing the best food, and attractive dishes may be manufactured by the clever cook from the simplest of ingredients.

The young housekeeper will do well to judge how much of the family resources may be devoted to the catering each week, and arrange her menus accordingly, recollecting that a variable diet is acceptable, while seeking to keep within the bounds of the allowance.

When taking up residence in a fresh locality. if no tradespeople have been recommended by friends, it is wise to ascertain the whereabouts of the best market-place, and to visit the shops in order to form an opinion as to which will supply the best goods at a reasonable price. Having found reliable shopkeepers, do not continually seek to change, but endeavour to make the transactions of mutual advantage to both buyer and seller; trustworthy service and confidence on both sides will be the result, and should any suggestion for improvement in any way be made by the customer, it will usually receive careful attention. The maintenance of happy relations with the tradespeople goes far to lessen the cares attendant upon the caterer for the family.

Shopping should be carried out by the house-keeper herself when possible, and much time, may be saved it a list of requirements, quantities and approximate prices be prepared beforehand. Ordering by telephone or post is generally unsuccessful. Early marketing secures a better selection of goods, and food which is "in season" is always more economical than that which is "out of season," while food reduced in price is generally doubtful, being offered as a bargain because of staleness, inferior quality or for a similar reason. Shops where it is the custom to throw articles heavily upon the scales are not usually to be recommended, since this method may indicate

the habit of giving short weight. Where the payment of ready money is not possible, the house-keeper should have her order books and accounts made up weekly, checking them and settling with the shopkeeper at stated periods.

Some non-perishable goods are cheaper if bought in large quantities, waste being avoided by careful storing; it is therefore advisable to ascertain what foodstuffs may be obtained at reasonable prices at certain times of the year, and purchase as large a stock of these as may be compatible with the requirements and purse of the family, having due regard, of course, to the storage accommodation and the nature of the articles.

What quantity to buy for a given number of people is frequently a difficulty which presents itself to the novice, waste being the consequence of overstocking in one direction, while perplexity and annoyance of the cook will be the result of shortage in another. The amount consumed by the family will, of course, depend largely upon the individual appetites of its members, and the caterer will speedily grow accustomed to ordering the requisite quantities, but in the preparation of special dishes, the quantities needed for a number of people may usually be ascertained from the recipes in any good cookery book.

In the case of foods liable to become contaminated readily, such as milk, meat, fish and bread, it is of the utmost importance that the source of supply, as well as the shop from which delivery is made, should be beyond reproach as regards

cleanliness and the absence of bad smells or infectious gern's; milk in particular may be the medium for carrying and spreading disease if special care be not taken in the handling of it.

CHOICE OF COMMON FOODS. With meat the flesh should be firm and elastic, not too moist, of fine texture, giving off little or no smell, and never an unpleasant one. Little waste and shrinkage will occur with good meat when properly cooked.

Beef of a bright red colour, well marbled with creamy-white fat free from kernels and blood streaks, with the outside aver not unduly thick, may safely be purchased, ox beef being considered the best. This class of meat will be found more tender if allowed to hang for a few days, although care must be taken to see that it does not become tainted.

Mutton, not so red in colour as beef, has a fat white and firm, the quality of the meat depending largely upon the age of the animal (3—6 years), and the district in which it was reared; in England two of the best for table use are Welsh and Southdown mutton. Very lean meat frequently flavourless, while excessively fat joints are wasteful.

Lamb, of a paler colour than mutton although more tender, is more watery and less nutritious, and the fat is of a pearly white. This meat will not remain good if hung for a long time.

New Zealand or Canterbury lamb, being frozen for purposes of export, should be well thawed before cooking; if this is not properly carried out the meat is very tough, and a bad colour.

Veal should be of firm texture, closely grained, very pale in colour, with white fat, and odourless. It contains less nitrogenous matter than beef, and is usually considered more difficult to digest.

Pork, with flesh of a pinky-white tint-skin thin, and fat firm, white and free from kernels, should be chosen with care from a reliable source only, the pig being more liable to disease than perhaps any other animal used for food. In the warm months of the year it is unwise to purchase fresh pork at all; a popular method of ascertaining when this meat is in season is to spell the name of the month and only invest in pork when the letter "r" forms part of such name.

Liver, kidneys, tripe, sweetbreads and similar foods need to be bought as fresh as possible,

and should be used immediately.

Hams should be selected with a moderate amount of white fat, short and thick in shape, with thin rind and the bone fine.

Avoid yellow, greasy-looking fat, and ham with a musty smell. A good test may be made by running a skewer into the meat close to the bone; if on drawing it out, the skewer is clean and sweet smelling, the ham may be considered good, but it should be discarded if the skewer comes out greasy and unpleasant.

Bacon with good red flesh adhering closely to the bone should possess firm white fat, and the

rind thin, elastic and smooth. Both bacon and ham if cured at home will be found to improve if hung up for a couple of months before using, care being taken, of course, to protect the meat from dust and damp.

POULTRY. Chickens fit for table should be plump but without a superfluity of fat, which would render them greasy and gross in flavour; the eyes clear and full; no discoloration apparent on the body, but firm white flesh with smooth, supple legs, and feet whose scales are hard, overlapping one another. Thin, smooth skin, feet large for the size of the bird, with small round spurs, soft pliable breastbone and beak, and toes which break easily if bent backwards, indicate a young fowl. Very fresh chickens are better for boiling or steaming, but if required roasted may be hung for a day or two to become tender; old birds are of no value when roasted, but can be utilized for other culinary purposes, and should be procurable at a cheap price.

In selecting geese or ducks, note that the feet and bills are elastic, pliable, and yellow in colour, if these are stiff, red and hard, the bird is an old one.

Turkeys of a moderate size, with smooth black legs and short spurs, will be nicer than very large birds; the hens may be generally considered more satisfactory for boiling, on account of the whiteness of the flesh.

GAME. Many of the same observations will apply in the selection of pheasants, partridges and other winged game, as have been noted with regard to chickens; in addition, however, it is well to avoid badly shot and very highly smelling birds.

FISH. The eyes of fish should be bright and not sunken; the gills a clear brilliant red; the body stiff with the flesh firm and elastic to the touch; no unpleasant odour should be present, and the colouring and markings clearly distinguishable. Fish of a moderate size are superior to very large ones, which are apt to be gross in flavour, and those of a short, thick appearance will be found more economical than long, thin ones. In choosing a cut of fish, the flesh should be firm with a close grain. Shellfish should be heavy for their size and the sharp springing back of the tail of a lobster after being pulled out straight will indicate that the fish is fresh.

RABBITS. Large knee joints, velvety brown fur, and soft tender ears, mark the young wild rabbit. The claws should be smooth and sharp, and the flesh when the animal is skinned should present a moist appearance with a bluish tinge. Rabbits need to be used while very fresh. Ostend rabbits will be of a lighter colour, and the limbs and neck much longer than those of the wild variety.

CHEESE, BUTTER, and LARD, should be free

from rancid taste and smell. The texture of cheese will depend upon the particular kind, but lard and butter should be firm and of uniform colour throughout, the streaky, watery varieties being inferior.

EGGS. Fresh eggs possess a bloom upon the shell, and have a transparent appearance; stale eggs will float if put into water.

VEGETABLES. All green vegetables should be crisp, bright in colour, and as fresh as possible, decomposition setting in very soon after the goods become stale. Cauliflowers of a medium size, with the head firm, close and white, and the stalk and leaves tender, are the best for table use; cabbages and brussels sprouts need to be green with light centres; cucumbers thick and firm with smooth skins; peas and beans crisp and bright green, loose peas in a dry-looking pod denoting age; celery should have clear white thick stems, laid closely together. As potatoes are mainly affected by the soil and weather under which they are grown, it is difficult to guarantee that the same kind will always be of uniform excellence. It is, therefore, wise to try two or three samples before buying a large store any one variety. Generally speaking, those of a fairly large size, regular in shape, free "eyes," will holes and superfluous be found the best for cooking as well as the most economical. Very small potatoes lose a great deal of weight in the peeling. Potatoes

should be bought in the autumn, when they are cheapest, and stored in a dry dark cellar, well covered with straw or sacking to guard them against frost; a damp light storing place will promote the growth of sprouts, which must be rubbed off immediately they appear, or the potatoes will be rendered worthless.

Jerusalem artichokes should be of a fair size, and may be stored in the same way as potatoes.

Carrots, turnips and parsnips should be purchased when fresh and of a good size, and laid on the floor of a dry dark cellar, or in dry sand.

Select onions which are of good shape and firm all through. When harvesting onions they should be first dried in the sun, then hung up in strings or net bags, away from other foods.

Herbs, when grown in the garden, may be stored for winter use. They should be gathered on a fine day, shaken and washed in cold water, then quickly dried before a fire or in the bright sunlight (if hung too long the flavour is lost); the leaves may be stripped off when the herbs are quite dry and passed through a sieve, to be subsequently stored in bottles or tins with protective covers.

Of the common herbs basilis in season in August; fennel and chevril from May to July; mint, sage, thyme, tarragon and marjoram in July.

For mixed herbs, I oz. of each of the following: basil, thyme, parsley and marjoram, passed through a fine sieve, will be found excellent.

Parsley may be kept fresh for winter use, if, after washing and drying, it is packed in clean

jars with salt between each layer; the bottles should be quite full and tied down to keep out the air.

FRUIT. Store fruit in a dry attic, loft, or special storing place, but not in the larder.

APPLES. Select those of a good keeping variety, and as unbruised as possible. Place them on dry straw, or upon shelves of laths, not too closely together, that they may not touch one another; examine them from time to time, removing all decayed apples, and turning them over occasionally that they may not always rest on the same side.

PEARS should be sound when stored, and may be treated in the same way as apples, or hung by the stalks from a line.

LEMONS AND ORANGES may be hung in nets, or laid upon a shelf, care being taken, in the latter case, to turn them daily, and to remove immediately any decaying specimens.

BANANAS. If required for immediate use, these should be of a deep yellow shade, and the small varieties will be found best for eating, although the large, coarser kinds serve very well for cooking purposes. If bananas are to be stored they should not be too ripe when purchased, even if green they will ripen when hung in a dry warm storeroom.

THE LARDER. Every house ought to be provided with a cool, dry, and airy place for storing

perishable foods.

A northerly aspect is the best, but where this is not possible, the sunshine may be kept out by means of a tree planted outside, sunblinds or wet sacking hung over the window in a position which will not impede the progress of a free current of air. The window should be on an outside wall, and may be fitted with fine wire gauze or perforated zinc instead of glass; this will allow of uninterrupted ventilation while at the same time keeping out flies and other insects.

A floor of brick, tiles, stone or concrete is the most cleanly and note should be taken that there are no untrapped sinks present such as are usually found in old-fashioned larders. Walls of glazed bricks or tiles are excellent, but for ordinary purposes lime or whitewash are quite good.

Shelves of stone, marble, or slate are better than wooden ones, being more readily kept clean and non-absorbent should liquids be spilled upon

them.

A lime-washed ceiling with rods fixed from side to side of the larder and fitted with strong hooks from which meat, bacon and game may suspend.

Fittings of the simplest nature are all that are required for the larder; they may include a vegetable rack, bread pan with cover, wide, shallow basins for the preservation of milk where these are not kept in a separate dairy, bowls for dripping, muslin for covering pans and dishes, wire meat covers, and a meat safe. With the aid of a thermometer the heat may at all times be ascertained, and an even temperature of about 50° Fahrenheit in summer and not less than 38° in winter, should be preserved.

CLEANING THE LARDER. Above all things, cleanliness is the first essential, since food cannot be expected to keep wholesome and sweet unless the place for storing it is free from dirt and contaminating germs. Once a day it is necessary to wipe down all the shelves with a clean damp cloth, and once every week all the contents of the larder should be turned out; shelves and floors thoroughly scrubbed with hot water, to which soda and a little sanitas or carbolic acid have been added; fittings cleaned and meat hooks scalded; walls washed if tiled or painted, or brushed down if whitewashed, and finally all utensils carefully dusted before being replaced on the shelves. Limewash and whitewash require renewing once or twice a year.

MANAGEMENT. A daily inspection of the larder by the housekeeper will be regarded as one of the first duties of the day. Arrangements should be made upon this occasion for utilizing all remains of dishes left from the day before; tainted food should be removed immediately; the bread pan wiped out and the stale pieces made use of. Never put food into the larder while

hot, or the temperature of the place will rise unduly, and recollect that all food should be put aside in clean basins, dishes or bowls, being covered with fine muslin or wire covers to keep off the dust and flies. Hang uncooked meat, game, etc., with the cut side uppermost, to prevent the escape of the juices. Keep raw vegetables in racks, baskets or boxes.

In hot weather bowls of cold water, to which a small amount of disinfectant has been added, will help to keep the larder wholesome.

ECONOMY. To guard against waste in the larder, see that nothing is thrown away which can possibly be used. Superfluous fat from, the meat is very good for frying and other purposes if clarified, as is also dripping from the joints; bones and scraps of meat may be a welcome addition to the stockpot, while remains of meat; fish and cold vegetables are frequently needed to complete made-up dishes. Have everything checked and weighed as it comes into the house, in order to make sure that it agrees with the amounts specified upon the tradesman's invoice.

METHODS OF KEEPING FOOD. Ham and bacon, covered with muslin or grease-proof paper, should be hung up in a current of air. Lard and dripping need to be kept in tightly covered jars or basins. Suet is best preserved for a few days by chopping or scraping it finely and covering it with flour, or the lump may be covered with flour after having had the kernels (if any) removed.

If cheese be wrapped in grease-proof paper and kept in a covered cheese dish, it will not become dry.

Bones for soup will remain fresh for a few

days if baked for a short time in the oven.

Bread requires a ventilated earthenware or enamelled pan with a lid to prevent its becoming dry, and should never be put into the pan while hot, or the steam will render the bread moist.

Milk is most likely to retain its freshness if kept in shallow basins, covered with muslin to prevent the entrance of dust and flies. A later supply should never be added to that already in the basin, and in very hot weather scalding the milk will aid in keeping it from becoming sour.

BUTTER. A convenient method where there is no refrigerator is to place it in a basin or dish which should be covered with muslin. In hot weather a. butter cooler will needed; this may be improvised by placing the butter in a jar which should stand in a basin of cold water to which three tablespoonfuls of common salt have been added, the whole covered with muslin whose ends should be allowed to dip into the water, thus keeping the material constantly wet: the water must be changed every day. In the country butter is often kept firm by placing its covered receptacle in a hole in the ground, the top of which may be protected by a covering of slate.

To sweeten rancid butter. To every pound of butter add one tablespoonful of salt and one

teaspoonful of carbonate of soda, cover with cold water, mix well and bring to boiling point. Pour into a clean basin, and leave till set. Remove and wipe the butter dry.

TO STORE BUTTER. In the autumn and other times of the year when butter is cheap, it may be pressed into jars with layers of salt between. When required for use the salt may be washed off with clean cold water.

Eggs are best stored in a basket or wooden rack specially made for the purpose.

Several means may be resorted to for preserving eggs for future use, but the following methods are, perhaps, the most successful:

- (1) Pack the eggs in an airtight tin with layers of dry coarse salt, taking care to place them with the small ends downwards.
- (2) Smear the entire shells with vaseline oil, lard or clarified fat, and repeat the process about every six weeks.
- (3) Pack in lime or lime-water; this treatment, however, renders the shells brittle, and the eggs can seldom be boiled.
- (4) Pack them in a solution of water-glass, silicate of soda, for the use of which full directions are printed on the tins, procurable at most chemists.

Among the foods unsuitable for storing in the larder with other dishes are herrings, onions, apples or anything with a strong smell liable to be absorbed by the milk, eggs and butter.

The meat-safe, if not kept in the larder,

should be hung out of doors in a cool shady place, but never in the near neighbourhood of the dust bin or lavatory. In flats a place near the open window of the scullery is often a convenient spot, although care must be taken to see that it is not fixed too near the sink. Meat safes should be inspected daily, the shelves wiped with a clean damp cloth, and once a week the entire safe scrubbed and thoroughly dried. Meat should be put away in the safe upon a rack or hung up so that the air may reach all sides; it will quickly become tainted if allowed to rest flat on the dish. See that the door of the safe is kept firmly shut, and do not put uncooked meat and fish into it at the same time.

THE STOREROOM. In every house a small room or cupboard should be given up for the safe keeping of dry goods and preserved provisions. Situated near the kitchen, it should be cool and dry, well ventilated, well lighted and as large as possible. With a wooden or tiled floor, and whitewashed walls, it may be fitted with shelves either enamelled or covered with American cloth, as a resting-place for jars, bottles, canisters, etc

A large cupboard for storing glass and china, with drawers to hold mats, dish frills, brown paper, kitchen paper, string, etc., and a small cupboard for the exclusive use of poisons, whose bottles should all bear the usual red "poison" label, and which should be kept locked, will be found useful.

Other requisites comprise a strong table, chair, household scales, steps to reach to the top shelves, dust pan and brush, a file for papers; slate, pen, ink and pencil, a store book for the entry of particulars as to the ordering, delivery and disposal of stores, jars and tins with lids for the preservation of the goods, and knives, spoons, scoops, scissors, corkscrew, duster and other small articles which may be kept in the table drawer.

MANAGEMENT. Keep everything in its appointed place, edible goods being stored away from the cleaning and household materials, and jams, pickles, and bottled fruits in the coolest, driest, and darkest corner.

Have a definite time for giving out stores, and order fresh supplies at stated periods; examine goods which may deteriorate, keeping a look out for mites in sugar, maggots in figs, cheese or bacon and moths in flour; never place a new stock on the top of old, but empty and clean the receptacle before the fresh goods are stored in it; see that nothing is left uncovered or in the original bags; guard against mice, beetles and other pests by seeing that any holes in floor or walls are repaired; open the window daily; keep the accounts accurately; lock the doors, and allow the key to be in charge of one person only.

Some goods are more economical if bought in large quantities. Soap, for instance, is wasteful if used too new, but care will be needed when storing new soap to ensure that the pieces or bars are so stacked as to allow the air to pass between them.

Candles will become hard and dry, and less liable to burn away quickly, if kept for some time before using.

Flour may be purchased in quantities if the storeroom is dry, and an airtight, wooden or zinc bin is provided for it.

All cleaning materials improve with keeping

for a time.

On the other hand, discretion must be used in purchasing other items of daily need. Pulse foods, such as lentils, peas, and beans will develop insects if kept too long; moist sugar may be infested with the sugar mite; dried fruits with maggots; spices will lose much of their essential flavour; oatmeal may become sour and stale; and coffee, whose flavour is volatile, will soon deteriorate in quality.

PESTS. Among the common pests, the unsanitary housefly may frequently be kept away from foods by the free use of flypapers, traps, or a solution of fly-bane, one part to ten of water, sprinkled about the room. Another mixture of quassia chips, over which hot water sweetened with sugar has been poured, may be put about in saucers where the flies are troublesome.

For blue-bottle flies mix together half a teaspoonful of black pepper, one teaspoonful of brown sugar and one of cream; put it on a plate in the place where it is needed.

For ants, treacle in a jar will be a successful

trap, and for red ants, cloves in their haunts will keep them away.

For blackbeetles, cockroaches, mice and rats many and various means of extermination may be adopted, among the most efficacious being the Penyester Magic Paste, the tins of which will furnish all directions for use.

Cleanliness, of course, in the storeroom, as well as in the other parts of the house, is the first essential, and if this be carefully attended to, there is very little fear of either pests or other obnoxious insects being allowed to play havoc among the stores.

CHAPTER X

ENGAGING AND DISCHARGING OF SERVANTS—INSURANCE

The domestic service problem is one which practically every housekeeper must face at some time or another, and a few hints as to the methods of obtaining cervants, their various duties, and the responsibilities of the mistress, will no doubt be a welcome addition to the means which aid in the attainment of what every home-maker must earnestly desire, a state of domestic peace, happiness and comfort.

It is well to bear in mind the old saying that "A good mistress makes a good servant"; this is perhaps more than half the truth, although it must not be forgotten that the servant also has his or her part to play, to ensure the pleasant relations which are the first essential between the employer and employed. A capable mistress at any rate usually succeeds in exacting the best service, while the considerate mistress will usually be rewarded with willing service.

The number of servants required for the work of a house will depend first upon the circumstances of the employer, and upon the size and convenience of the house; the amount of work to be done will, of course, have to be considered, much furniture to clean, metal work to polish, elaborate entertaining, and a large family upon whom to wait, necessitating a greater number of servants than a simple, quiet household of average size.

Economy of time and labour may be promoted in many ways. A place should be appointed for everything, and everything kept in its place. The proper time arranged for the execution of each portion of the work should be strictly adhered to, and all members of the family trained to be methodical and punctual, rising early and each making himself or herself responsible for the tidy disposal of his or her belongings. The young children should be taught to put away their toys after use; the elder children to return to their respective places all books, games and chairs which they employ, to keep their rooms tidy, fold up their clothes, and perform many other small duties, the neglect of which will create trouble and extra work for the servants. In many houses, too, the mistress or the elder daughters may give valuable assistance with the arrangement of flowers, the necessary dusting, attending to the linen and mending, or by undertaking a part of the cooking. Young housewives will frequently fall into the mistake of over-staffing the household, and then

the difficulty of finding sufficient work to keep all employed arises. It is better to under-staff at the outset, it always being easier to increase the number of servants than to decrease, the discontent caused by the latter method being hard to quell.

ENGAGING SERVANTS. The most popular ways of obtaining servants are by advertising in the newspapers, inquiring among friends, acquaintances and tradespeople, or by soliciting the aid of the Registry Offices.

A, short advertisement, stating the class of servant required, and asking for references, is usually sufficient in the first case, and will generally bring speedy replies. Discretion, however, must be exercised in selecting from these, and only those persons whose references are good should be entertained, or much trouble and expense may be wasted by unscrupulous persons, whose only object is, perhaps, to obtain the railway fares, which it is usual for the intending employer to pay when interviews are given, or to gain access to the house for purposes of burglary and so forth.

At Registry Offices rooms are usually set apart in which interviews may take place, and much trouble is thus saved both to mistress and servant. It is advisable to apply only at the best and well-established offices, or the expense involved for fees, booking, and travelling to the office on fruitless quest, may be considerable ere suitable servants are introduced.

The method of seeking recommendation from one's friends or tradespeople, is often a lengthy business, but is more satisfactory; as a rule, than obtaining servants by other means, and more information can generally be furnished as regards the character and home circumstances of the employed, while he or she may be able to gain some idea of the employer's household.

Interviews with possible servants should have the effect of establishing good faith on both sides, and the mistress should be careful to explain fully the duties required as well as to enumerate the privileges granted. Ascertain the amount of wages formerly received and now required; inquire as to knowledge of the work, length of time in'the last place and the reason of leaving, and if possible gain some particulars as to home and upbringing. After a satisfactory interview, communication should be made with the last employer with the view to being satisfied as to the good moral character, cleanliness, neatness, capacity for work, good temper, health, punctuality and sobriety of the servant; it is seldom satisfactory to accept written characters brought at the time of interviewing. A personal interview with the late employer is better, wherever practicable, as fuller and more definite information is usually obtainable.

Wages are usually paid monthly, and are due from the day of entry into the situation. A book should be kept for a record of the dates and amounts paid, which the servants should sign as a receipt for the money. A regular pay day should be adopted, since any departure from some such system is liable to lead to unpleasant feeling. The proper wage which may reasonably be expected differs, of course, with the class of servant, as well as with the amount of training it will be needful to give. A well-trained servant is worth a good wage, while the young untrained girl may be obtainable for far less, but in this case the mistress must be prepared to give her the advantage of her experience and teaching, so that she may rise in her profession and later command better wages. The young servant is wise who will take the trouble to perfect herself in all branches of her work, carefully studying the interests of a good mistress, and turning to the best account all the training she may receive.

An exact table of wages can hardly be fixed; besides the class of servant, the kind of work required, and the supply and demand in the locality may be factors in the determination of what amounts are just and fair. These again will differ from time to time, but the following table may be considered representative of what is demanded in large towns at the present day:

Housekeeper	from	£25 to £60 p	er ann.
Cook	,,	£20 to £50	,,
Kitchen-maid	,,	£16 to £25	,,
Scullery-maid	,,	f10 to f 18	,,
Stillroom-maid	,,	£18 to £26	,,
Head nurse	,,	£25 to £35	,,
Under nurse	٠,	£12 to £20	,,
Parlour-maid	,,	£20 to £30	,,

House-maid from £20 to £28 per ann.
General Servant ,, £12 to £28 ,,
Butler ,, £50 upwards ,,
Footman ,, £18 to £40 ,,

In addition to wages, the board is provided, and an allowance of 1s. 6d. to 2s. 6d. per week is made for laundry.

Where the servants are left in charge of the house, or sent home during a period of absence by the family, board wages of an amount from

7s. to 12s. per week should be given.

Holidays are more or less ruled by individual circumstances, but one evening per week, alternate Sunday afternoon and evening, or every Sunday evening, one day in the month, and a couple of weeks in the year, is generally con-

sidered a fair proportion.

Occasional outings and frequent opportunities for obtaining fresh air outside the house may be arranged by the mistress, and will, aid in maintaining good health and spirits among the servants. Perquisites and commissions from tradespeople are to be deplored, habits of extravagance and even dishonesty often being the result. No deduction can legally be made from the wages on account of breakages, unless an agreement to that effect be made at the time of engagement.

DISCHARGING SERVANTS. If shortly after entering into a situation, either servant or mistress desires to terminate the engagement, notice may be given and the servant leaves at the end of the month, otherwise a full month's notice is due from either side, or a month's wages (not board wages) must be given in lieu of notice. Should the servant leave in the middle of a month without giving intimation of such intention, the wages for the period subsequent to the last monthly payment will not be due, and cannot be claimed, and if a servant be dismissed summarily for drunkenness, dishonesty, immorality or any such fault, the wage is due only up to the day of dismissal.

Among the reasons which justify a servant's leaving without giving due notice are danger to life or violence to person; improper food, and infectious disease in the house. A servant leaving for either of these causes is entitled to wages up to and including the day of departure.

CHARACTERS. No legal obligation is laid upon the employer to "give a character," but if this be done, only such facts as are honestly believed to be the truth should be stated. The refusal to give a character will generally indicate the commission of some grave offence.

INSURANCE AND EMPLOYERS' LIABIL-ITY. By the National Insurance Act (1912) most employers and employed in the United Kingdom must contribute to a joint weekly insurance against sickness, the amounts payable being sevenpence for each man, and sixpence for each woman. These contributions must be attended to by the employer, who himself pays threepence

in each case towards the weekly sum, and a stamp to the value of the full weekly amount must be affixed to cards designed for the purpose, which may be procured from any approved society or from the Post Office. The employer being liable for the payments, is authorized to deduct the amount due by the servant from any remuneration for service, if such amount be not forthcoming otherwise. Contributions are not paid during periods of sickness, not are they to be regarded as arrears during such time; during unemployment if not paid the arrears affect the future rate of benefit. With few exceptions, all workers between the ages of sixteen and seventy of either sex, and whose wages do not amount to more than £160 per annum, are included under the Act.

The benefits to the insured persons, purporting to be now in force are: (a) sick pay for twenty-six weeks, of 10s. weekly to each man and 7s. 6d. weekly for each woman. (b) Medical benefit. (c) Medicine and surgical appliances. (d) Maternity benefit of 30s. for each child. (e) Sanatorium benefit for consumptives.

To obtain sick pay, contributors to an approved society should send the doctor's certificate to the secretary of the society, and payments of 10s. weekly for a man, or 7s. 6d. weekly for a woman, are due after the third day of illness. Insured persons may select any doctor from the local panel list, and the doctor must sign the card when accepting the patient for treatment. Where difficulty arises the local

Insurance Committee should be applied to; also in the case of deposit contributors—those who do not belong to an approved society—applications for sick pay must be made to the local Insurance Committee, this class of contributors only being able to claim benefit up to the amount to which the stamps on their cards entitle them, and twenty-six weekly payments must have been made before any benefit at all is due.

As under the Workmen's Compensation Act (1906), the Employers' Liability Act (1880), the Fatal Accidents Act (1846), or at Common Law employers may find themselves liable to compensate workpeople or their legal representatives, in the event of accident occurring during the period of service, or in the event of the employees having to suspend work on account of any of the diseases mentioned in the Third Schedule of the Workmen's Compensation Act (1906), it is almost a necessity that the employer should safeguard himself by insuring against such contingencies with one or other of the many Insurance Companies who accept this responsibility.

CHAPTER XI

DUTIES OF SERVANTS

WAITING AT TABLE; APPOINTMENTS, ETC.

TATHAT is more annoying in the house than to have the work done at no particular time, unpunctual meals, too much crowded into one day and very little to do the next, and how many good hours are wasted when the servants have no particular system for working drawn up for them. The drawing up of the timetable, then, is one of the most important duties of the mistress, and she should so arrange matters that the work is evenly distributed throughout the week among the entire staff of servants, so that if possible every part of the house may be cleaned once during the week. Regular hours for meals, rest, and recreation should find a place in the time-table, which should be hung in a conspicuous place in the kitchen, and strictly adhered to in every detail. Avoid the overlapping of the work of one servant by another,

and give into the exclusive charge of each the utensils necessary for the execution of her duties; these must all be in good condition when handed to her with an inventory, upon entering the situation, and she should clearly understand that fair treatment of them will be expected, and that they must be returned in good condition when relinquishing the work, due allowance, of course, being made for ordinary wear and tear.

DUTIES. The Housekeeper, either the mistress or her immediate representative, must oversee all the work of the house, paying attention to the comfort and welfare of the staff, and noting that each servant's duties are properly performed. Punctual, orderly and methodical, she should understand every part of the work, and be able to keep accurate accounts of all moneys received and disbursed, as well as of all articles purchased and used. Economy and thrist should be her watchwords, and by early rising she will be able to better superintend the morning work of the servants and see that they get to their tasks in good time. A good knowledge of cookery in all its branches will enable her to cater well and arrange the various meals to the best advantage.

Periodical inspection of the linen, with a view to having it repaired and to the replacing of worn-out goods, and also an occasional checking of the inventories of the glass, china, silver, and cutlery should form part of her programme.

The housekeeper should make a daily tour

into every part of the house in order to satisfy herself that everything is clean, and all departments of the daily work correctly carried out.

The Butler superintends the men servants, and takes charge of the most valuable articles in daily use, also of the wine cellar. Among his domestic duties are overlooking of the arrangement of the tables and serving of meals, assisting with the waiting at breakfast and luncheon, directing affairs and serving the wines at dinner. Where only one footman is kept, he may be called upon to perform the duties of a valet, pay accounts, and render other assistance to his master in many ways. He has charge of the library and billiard room, the letters, visitors' cards, and messages; he attends to the front door, announces visitors, sees that the house is securely locked up at night and the fires left safely.

The office of butler is one of great responsibility, and care should be taken to select a man of trustworthy, honest, sober character, possessed of common sense.

The Footman. Where the footman is the only male servant, he will be called upon to perform a variety of duties, combining the offices of butler and odd man with his own; he will have to clean knives, boots, plate, windows, fill the lamps, lay and clear away the breakfast things, attend with the carriage or motor in the afternoon, or attend to the front door when indoors, look after the sitting-room

fires, wait at table, and valet the gentlemen, brushing their • clothes, calling them in the morning, and seeing that hot water is taken to their rooms.

Where a butler is kept, the footman will be under his orders.

The Cook is the head of the kitchen, and, with the assistance of the kitchen-maid and scullery-maid, manages everything in the culinary department. The cleaning and care of the kitchens, pan'ry, scullery, larders, steps, brasses, servants' hall, servants' bedrooms, and sometimes the dining-room, are committed to her charge.

In a small household, where only three maidservants are kept, the cook may be called upon to perform other parts of the housework, and if there is only case housemaid besides herself to carry out the entire work of the family, she is usually designated the cook-general, and, in addition to the cooking, will undertake to clean the dining-room, hall, passages, steps, brasses, servants' rooms, kitchen offices, and will wash up, clean boots, etc., answer the front door bell until midday, and the back door all day.

The Housemaids are responsible for the sweeping and cleaning of the sitting-rooms, bedrooms, dressing and bath rooms, lavatories, stairs and passages, for the proper care of all utensils employed in the work, and for the airing of the house by opening the windows and shutters. Where there are only three servants in the house, the housemaid will assist in waiting at

table, lay the meals, and assist with the care of the linen. If she and the cook manage all the work between them, she will in addition have under her charge the glass, china, silver and ornaments, will wait at table, answer the front door during the afternoon, and the house bells throughout the day, as well as attending to the fires in the sitting-rooms, and lighting those in the bedrooms when needed.

The Parlour-maid has complete charge of the dining-room, the table and all its appointments, and the floral decorations. She will attend to the front door bell all day, give assistance with the bedmaking, dusting and other light duties. Where no lady's-maid is kept, she will frequently take charge of the mistress's clothes, and also give help with the house mending.

The General Servant. As the name implies, she will undertake the general work of the house, where there is only one servant kept, although assistance is often given by the mistress with the cooking, dusting, bedmaking and so forth, and the help of a charwoman sought for the heavier cleaning.

The Houseboy or Odd Man will clean boots and knives, fill scuttles, attend to the lamps, assist the cook and menservants, and make himself generally useful.

The Valet and Lady's-maid have entire charge of the clothes and personal belongings of their master or mistress, and see that their rooms are properly cleaned by the maids, and everything they require conveniently to hand; they will be ready to perform any kind of personal service, and frequently great confidence is placed in them.

In larger households many other servants may be necessary, including the between-maid, stillroom-maid, and laundry-maids, but it is perhaps unnecessary here to enlarge upon their duties, neither do the outside servants, such as gardeners, chauffeurs, and stable men find a place in a work of this kind.

Throughout Great Britain a licence must be taken out for each male servant annually in January, the cost for each licence being 15s.

TRAINING THE YOUNG SERVANT. In whatever department the young maid is to devote her time, common sense will be necessary to enable her to carry out the work with cleanliness, celerity and satisfaction both to herself and her mistress.

Never attempt too much at one time, remembering that all is new and strange to the untrained girl, and that a little learned well is worth more than a great deal acquired badly, and soon forgotten. Observation of small as well as of large matters, quiet movement, economy, thrift, the exercise of forethought, and disinterested, cheerful service, will mark the well-trained servant, and it is the girl who strives to perfect herself in all branches of her

work who will command the best wages, and the confidence of her employers.

Much trouble and unnecessary journeying from one part of the house to another may be saved if a little method be exercised, and the use of trays firmly impressed upon her; indeed, it is a good plan to have a convenient place set apart where articles may be put for transference, upstairs or elsewhere, when the maid comes along with her tray. She should be taught to be tidy in person and work, putting everything away in its place, and should be advised to take care of her hands and nails, particularly after performing some rough duty.

The young parlour-maid will need training in the art of waiting at table, and should thoroughly understand that any show of interest in the conversation while she is on duty is not

permissible.

Teach her how to properly open the door to visitors, announce them, and show them out, taking care not to close the door behind them until they are fairly away from the house. She will need to learn how to handle glass, china and fragile articles without chipping or breaking them, and how to take care of the implements she uses. Instruct her as to the importance of thrifty habits, advising the saving of a part of her wages, and warn her against the bad system of obtaining worthless jewellery from hawkers or agents demanding weekly payments.

Let the girl know that she has a friend in her mistress, with whom she can consult, and in whom she may confide at any time, but attempts at "familiarity" should at once be checked, or the maid's respect will be forfeited.

The mistress of the house will be wise to show consideration for her servants, while maintaining that firmness which is so essential to good discipline. She should see that each part of the work is carried out in accordance with the time-table, and that each servant undertakes his or her own share of the duties. The servants' quarters should be cheerful, and comfortably furnished; their health considered, cleanliness insisted upon, and opportunity given for frequent baths. If they are expected to rise early, the servants should get to bed at 10 or 10.30 p.m., or the early morning work is apt 10 be shirked and disorganized.

Personal supervision by the mistress should not create a feeling of resentment among the maids, but should be given in such a manner as to increase the cordial relations between employer and employed which are so necessary to the peace and welfare of the home.

The mistress must see that sufficient and efficient utensils are provided to carry out all duties, that the carelessness of members of the family does not entail extra work for the servants, that young girls are not allowed out alone, or late at night, without full knowledge by the mistress of their whereabouts and their friends. As much care should be taken to guard the young servants under her charge against possible dangers as would be done in the case

of her own daughters of the same age. Opportunity should be given to all members of the household to attend their own place of worship.

WAITING AT TABLE. A good waiting man or maid adds greatly to the comfort and success of a dinner, and as it is one of the highest branches of domestic service, it requires special qualifications. The work should be done as quietly and as quickly as possible, the mind being concentrated upon the business in hand, and close attention being given to the needs of those being served.

When the company is seated, the waiter will stand at the left of the carver, uncover the soup (unless this be served from the side table), and carry a plateful to the lady on the carver's right, or if no guest be present, then to the mistress of the house, placing it in front of her from the left-hand side. Plates are removed from the right-hand side of the diner, and put upon the sideboard, with knives and forks in a lined basket for the purpose.

The following courses are treated in the same manner, any accompanying sauces being carried round in the left hand.

Entrées and vegetables are handed in their dishes by the waiter, as are cheese and savouries.

The waiter then removes everything which is no longer required, takes away the slips and crumbs, and places the dessert upon the table, supplying each person with a dessert plate upon which is arranged the finger bowl on its d'oyly, together with a dessert knife and fork.

As each course is nearly finished, the waiter will ring the cook's bell to indicate that the next may be sent up, empty dishes being placed outside the dining-room, to be carried away by the server.

After the dessert is arranged, the waiter may remove all plates, etc., from the sideboard, and leave the room until it is vacated by the family, coffee being served in the drawing-room subsequently.

Conversation among the waiters is to be deplored; each should know his duty so thoroughly, that little or no direction should be needful from the head.

LAYING THE TABLE. Where it is the custom to use a white linen cloth, an under one of white felt, serge or some thick cotton sheeting, termed the "silence cloth" will protect the table, increase the life and good appearance of the tablecloth, prevent any stains from appearing in case of accident, and render the serving almost noiseless by deadening the sound of plates, etc.

The tablecloth should be perfectly clean and without creases, the centre fold being laid down the middle of the table.

For breakfast, a smaller design and less elaborate cloth may be found more suitable than for dinner, and in either case a width of from 18 to 20 inches should be allowed to hang over the edge of the table. Serviettes should

match the cloth, and contain only sufficient starch to enable them to be folded into some neat fancy shape or rolled into a ring.

If the carving is done at the table, a carving

cloth must be laid under the dish.

When not in use the tablecloth should be carefully folded and kept in a drawer or cloth press, stains from spilt wine, tea, coffee, etc., should be removed as soon as possible, and not left till the cloth is laundered.

Arrangement of the table: If the room will permit, allow at least 20 inches space to accommodate each person at the table. The knives and forks should be placed in the order in which they will be required, beginning at the outside and proceeding towards the plate, the handles resting half an inch from the edge of the table, the pudding fork and spoon being placed in front of the space for the plate.

Dessert knives and forks do not appear upon the table, but are handed with the plate when needed; tablespoons find a place at the corners of the table, together with the cruets and waterjugs; glasses are grouped at the right-hand side of each cover, the tumbler being next to the knives, and the wine glasses close to it; a separate glass for each kind of wine to be served should be provided; generally two glasses are laid with the tumbler.

The bread, either in small rolls or cut into pieces, is put on the left-hand side of the plate, while the reserve supply is placed on the sideboard.

APPOINTMENTS. Good servants will always take a pride in keeping the silver, knives and cruets well cleaned, polished and dusted. Glass and china, too, need special attention in order that they may never appear at table unless in a bright, shining condition, the handles of cups, dishes and jugs receiving extra care lest any particles of dirt may have been left there. Nothing has a more slovenly appearance than a table set with cloudy glass, dull-looking china, or badly cleaned silver.

Salt cellars and sprinklers, if of metal, should be emptied daily, or they may be affected by verdigris, and saltspoons must never be left in the salt. Cruets need to be scrupulously clean and the mustard freshly made, not so thick as to adhere closely to the spoon nor so thin as to run off the rim of the plate, and the mustard pots should be only half full.

To mix mustard: Take a heaped teaspoonful of dry mustard, a pinch of salt, and two teaspoonfuls of cold water; mix smoothly until there are no lumps, and carefully place in the pot.

Butter looks well rolled into small balls or fancy shapes, served in clean dainty dishes.

Jam and marmalade may be served in small jars with lids and spoons to match, or in little open dishes; these, however, must be absolutely clean, and care must be taken when filling that none of the preserve finds its way over the edge of the receptacle. Pound pots of preserve are sometimes placed bodily into china covers made to fit them.

For the breakfast table a tray or breakfast stand may be used, upon which to serve the tea and coffee; unless made of silver or plated, the tray should be furnished with a dainty tray cloth of plain design, and the use of an overabundance of silver on the breakfast table should be avoided.

The sideboard and dinner wagon should be covered with clean cloths, and a few extra knives, forks, bread, and plates should be placed thereon.

When all is ready in the dining-room, the servant should sound the gong, or bell, if that be the custom of the house, or go to the drawing-room and announce to the mistress that dinner is served, leaving the drawing-room door open before returning to the dining-room. The most usual formula used when announcing dinner is, "Dinner is served" or "Dinner is on the table, madam."

TABLE DECORATIONS. To make the table look pleasing and attractive, while not over-crowding it with flowers and ornaments, should be the aim of the servant whose duty it is to look after this part of the work. Vases need to be perfectly clean, and the flowers quite fresh. Low decorations are usually preferable to very tall vases, which may obscure the view of the opposite side of the table.

Simplicity, perfect blending of colour, and harmonious shades will aid in making the decoration successful. In choosing the flowers, see

that they have not a very strong scent, as this may become objectionable if the room is hot, and avoid combining too many colours, which will not give so good an effect as one or two carefully selected tints. Flowers and foliage strewn on the table should be chosen from varieties which do not readily fade when kept away from water. The comfort of the guests being the first consideration, do not allow the floral decorations to be such as will interfere with this.

Wild flowers, autumn foliage, and small ferns may be utilized for table decorations, the latter standing in china bowls which should harmonize with the dinner service.

For the breakfast table, Claborate decorations are out of place; just a few simple ferns, or a couple of plain vases filled with flowers will generally be sufficient.

HOUSE PLANTS. Palms when used for house decoration, should be kept near a window or in a light place, and should be turned frequently so that all sides may face the light equally well. The tips of their leaves should not be allowed to touch the wall. Avoid giving them too much water, but take advantage of a light shower of rain to put them outside; a good test for dryness is to tap the pot with the knuckes, and if a hollow ring is noted, the plant needs water. The leaves should be sponged occasionally with tepid water, and the plants require repotting once a year in the spring time,

and may be treated with a little fertilizer at rare intervals during the rest of the year.

India-rubber plants need much the same treatment as palms, but care should be taken to keep them from draughts and sudden changes of temperature.

The parlour fig requires watering but seldom,

and should be placed out of draughts.

Ferns will need care in watering some kinds requiring much more than others; the repotting should take place in the spring as soon as the new fronds are seen to move.

Aspidistras: Put the pots into a bath containing tepid water for one hour each week, or if the weather be very hot, twice a week, or in the winter once in two weeks. Sponge the leaves frequently with milk and water to give a polish and free them from dust. Keep the plants in a shady place but away from the draught.

Generally speaking the following simple rules will apply to nearly all house plants: Only water when necessary, and do not leave the water standing in the saucers or bowls.

Put the plants out of doors in a rain shower which contains much of the ammonia so beneficial to plant life.

Keep a look out for brown spots on the leaves or leaves turning yellow, which may indicate disease; brown tips to the leaves will often mean that the plant is too dry.

Green fly and other insects may be removed by washing with a little soapy water, or carbolic

soft soap and water, followed by a syringing with

plain water.

In the growing season a little fertilizer may be given from time to time, but use sparingly and lightly loosen the soil before application; the fertilizer will be washed into the earth when watering the plant.

The best time for repotting is the spring, and before placing the plants in the new potr these must be washed and dried. Purchase only good potting mould and silver sand, shake off the old earth without disturbing the roots unduly, and plant firmly in the new soil.

Plants taken directly from hot-houses will often wither and die when exposed to the chill of an ordinary room, and when purchasing them from a nurseryman or shop ascertain that they have been thoroughly hardened.

Pot Pourri torms a delightful, old-world, scent for use in jars to be placed in and about the house. Almost any sweet-smelling ingredients may be used in its preparation, the following recipe being perhaps one of the most popular:

- 4 oz. each of jasmine flowers and rose petals.
- 3 oz. each of syringa and lavenda.
- 2 oz. lemon thyme.
- I oz. each bay leaves, balm of Gilead, bay salt and powdered cloves.
- oz. each marjoram, rosemary, musk, powdered cinnamon, gum benzoin and storax

Dry the flowers and herbs in the sun; cut up the balm and bay leaves; break the gums into small pieces and add to the spices; put a little salt at the bottom of the jar, then a layer of herbs and flowers, then a layer of spices and gums; continue with the layers until the jar is full; cover and leave for one week, stirring the mixture from time to time; place in open bowls or jars with pierced lids.

Pampas Grass: Where this is used for decoration the washing of it will become necessary from time to time. The following process will need to be carried out carefully to make the task a successful one.

Prepare a lather of warm water and soap jelly; shake the pampas thoroughly to remove the dust; hold the grass by the stem and dip it into the lather, squeezing it with the hand and shaking it in the water until the dirt disappears; rinse in several lots of tepid clean water; shake well and dry in the open air. During the time of drying, the grass should be shaken frequently to restore the fluffy appearance to the bloom.

CHAPTER XII

THE KITCHEN DEPARTMENT

THE MANAGEMENT OF RANGE, GAS, ELECTRIC AND OIL STOVES, THE FIRELESS COOKER

Qualities and prices are now obtainable, but in order to secure a good working stove the householder will do well to select one with a good reputation at a fair price. A cheap range is never a good bargain, the parts constantly burning through, cracking with the heat, or requiring to be renewed for some other cause. The cost, of course, will to a certain degree be determined by the size, the material used, and the amount of ornamentation and extra appliances, plain iron stoves being less expensive than those extensively fitted with brass, steel and tiles.

Fairly thick metal is needed in their manufacture, to enable the parts to withstand the great heat to which they are subjected, and the constant moving about; inferior thin metal

and faulty construction will cause a waste of fuel.

Choose the range with regard to its durability, efficiency and economy, selecting a pattern whose various parts may be easily duplicated if necessary, without waiting for them to be specially made in the event of the renewal of one of them.

The plates, or movable pieces at the top of the stove, should fit easily to allow of the expansion of the metal when heated. The cheeks, which are placed round the sides of the fire-box, are composed of fire brick, and are intended to assist with radiation while economizing the fuel.

The advantages of a range which may be utilized either as an open fire or a closed stove will be readily understood; not only does the open fire create less draught and consequently burn less coal than the closed one, but it is pleasanter to look at when the day's cooking is over; also, while acting as a good ventilator, it is useful as an agent for the drying and airing of clothes. An entirely closed range will dry the air of the kitchen, and will not assist in the ventilation of the room.

Select the stove which is suitable to the size of the kitchen, and in proportion to the amount of work expected of it; an adjustable bottom, which may be raised or lowered at will, is an important item if the coal bill has to be borne in mind.

A fire-box of medium size is the best for all practical purposes, the very small wells not

allowing sufficient heat to be given, and the very large ones being wasteful of fuel, besides wearing out the stove owing to the great amount of heat given out.

Ventilators, for the removal of any unpleasant smell from the cooking, are usually affixed to the stoves in the form of small sliding doors at the top over the plate rack, and a small similar fitment on the oven door.

BOILERS. The ordinary kitchener is usually supplied with a wrought iron boiler, placed at the side of the fire-box, or at the back when hot water is supplied throughout the house; these boilers are self-filling and are called "high-pressure boilers."

With the "Saddle" boiler, the flames from the fire pass underneath and are drawn up the central flue. As the water boils and expands, it passes up the pipe into a hot water cistern, pressing and forcing its way through all the hot water pipes in the house. The boiler itself is fed from a pipe leading directly from the cold water cistern. When the water in the hot cistern is heard to boil, it is well to turn on the taps for a short time, to avoid the possibility of a burst boiler. Where water is very hard, it will be necessary to have the boiler and pipes cleaned from time to time in order to remove the deposit of lime which will adhere to the inside. Take note that a safety valve is attached to every boiler of this description.

FLUES are passages leading into the chimney by which the products of combustion may escape. They should be made of iron; old-fashioned flues, built of brick, frequently became separated from the stove, owing to the contraction and expansion of the metal, and caused the range to smoke, the heat to escape, and rendered it impossible to heat either oven or boiler. Each flue is supplied with a damper, so that the heat may be directed to whatever part of the stove is required.

DAMPERS are metal sliding plates placed in the flues to regulate the draught of air. Where three of such plates are fitted to å range, the centre or chimney damper usually relates to the boiler, or to the drawing up of the fire; the second and third will regulate the heating of the ovens.

To manipulate the dampers in order to obtain hot water, push in the oven dampers, and pull out the chimney damper, thus causing all the heat to pass beneath the boiler which contains the water. For heating the ovens, close the chimney damper and pull out those relating to the oven, thus directing the heat towards it.

For roasting in front of the fire, push in the oven dampers and pull out the chimney damper a little way. This will secure a clear bright fire. The adjustable bottom of the stove should be lowered to its full extent, in order to enlarge the frontage as much as possible.

RE-COALING. To shovel on coal indis-

criminately when the stove is in use will usually interfere seriously with the success of the cooking, but if the following methods are adopted such misfortune will not result.

To re-coal during roasting: Bring the bright coals to the front and feed with fresh coal at the back. Do not allow the fire to burn too low before "stoking."

To re-coal while using the oven: Bring the firing to the ide of the oven, and put fresh coal in on the other side.

To obtain a good heat for cooking on the top of the stove push in the dampers to almost their full extent, to lessen the draught, and raise the adjustable bottom. To avoid continual need for stoking, coal may be damped and used to "bank up" the fire.

DAILY CLEANING OF THE RANGE. Put down a hearth cloth in front of the fireplace; brush and remove the fender; rake out all the cinders and ashes from the fire-box, brush the soot from under all plates and top of the oven, putting the flue brush down the side of the oven furthest from the fire, and removing all soot from behind the soot doors, carrying it carefully away in a shovel.

After having swept up the dust and soot from the stove, wipe it over with a duster kept for the purpose, polish it with a blacklead brush, and rub the steel parts with emery paper, and the brass with brass polish.

WEEKLY CLEANING OF THE STOVE. The flues will need cleaning at least once a week, or twice if much cooking is done.

Draw out the damper of the flue to be cleaned and close the others; remove the soot door, and pass the flue brush well up and down inside the flue; sweep the top of the ovens, back of fireplace and over the boiler, remove the soot door under the oven and sweep away the soot, proceeding in like manner with each flue in turn. The cleaning of the stove is carried out in the same way as for daily cleaning, until all soot and ashes are removed; then wipe off any grease with a turpentine rag, or wash with hot water and soda; brush out the oven and wash shelves and sides. Every part of the stove must then receive a coating of blacklead, with the exception of the polished steel and brass fittings, which will be cleaned with emery paper and brass polish. Stoves possessing steel tops will need properly cleaning once, a week, and rubbing with an oily rag every morning.

All cinders from the fireplaces should be collected into a sifter, and after the ashes have been removed will form a useful fuel for keeping the fire in, or for banking it up.

BLACKLEAD. To mix, place it in a jar with sufficient cold water, turpentine or vinegar to reduce it to a thick cream, adding a small piece of washing soda dissolved in hot water.

To apply blacklead a small round brush with long soft bristles should be purchased for the purpose; the rubbing should then be accomplished with a hard brush until a polish begins to appear, and the final polishing quickly and lightly done with a soft brush. Brushes suitable for blackleading are generally procurable in sets of three, and it is advisable to number them, so that the blacking brush may not be utilized for the polishing and vice versa, since it will be quite impossible to obtain a good polish if the brush be not perfectly dry and clean.

Starting with the top of the stove, finish one small piece before proceeding further, taking care to preserve as uniform an appearance as possible, applying the blacklead with the small brush, or with a piece of flannel in the case of the employment of one of the many specially prepared pastes which are obtainable, and which should be used specially, when they will give a

fine polish and produce little or no dust.

TO LAY A FIRE. Allow plenty of air space, and lay with a few cinders or small pieces of coal at the bottom of the grate, upon which pieces of crumpled paper or straw must rest, surmounted by the fire wood, placed crosswise to form a sort of lattice work; lastly arrange small pieces of coal and sifted cinders on the top of the wood; apply a lighted match to the paper in two or three parts, close the door of the stove and pull out the chimney damper until the fire has well drawn up. Too much wood is not necessary for laying the fire; sixteen small, dry sticks will usually suffice, if correctly placed.

TO CLEAN THE HEARTH. Wash off all the old hearthstone and wipe over the hearth with a flannel wrung out of clean cold water, afterwards rubbing the hearthstone well all over while still wet, and lightly wiping with the flannel backwards and forwards in even lines, taking care to leave no unsightly lumps or streaks of hearthstone. Leave to dry, and the result will be a good white clean-looking hearth.

OPEN RANGES. The old-fashioned open range, now seldom met with except in some country places, has usually a large open firebox in the centre, with oven one side and boiler the other. The boiler requires to be filled by hand, but otherwise the management is much the same as for a closed stove.

In comparing the open with the closed range, it may be urged against the first that the dirt is usually distributed over the kitchen; utensils become blackened; more frequent sweeping of the chimney is required; it is extravagant, much heat being radiated and consequently wasted, and that the heat is distributed unevenly. The latter class, on the contrary, may be considered cleanly and economical if properly managed; a great amount of cooking can be done with the same quantity of fuel; refuse may be burned without giving off unpleasant smell; utensils will last longer, and a constant supply of hot water is attainable.

PORTABLE STOVES. These may be placed

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in the usual fire-place or in any part of the room, and will require a connecting tube to carry off the products of combustion, either into the chimney or directly into the outer air, care being taken to see that such tube is carried to sufficient height, or a down draught will be experienced. This kind of stove is for the main part successful, but may fail to act or bake properly from insufficient draught caused by a leakage of air into the tube or flue when it is badly set; insufficient height of the chimney, or the neighbourhood of a higher building or trees, which may cause a down draught; or dirty flues—accumulated soot and ashes being non-conductors of heat.

GAS COOKERS. These when properly managed are both convenient and inexpensive. For summer use they are more comfortable than the kitchen range, since the room does not become overheated by keeping a fire going all day, hot water being always obtainable if the bathroom be fitted with a geyser. Gas cookers are clean, giving off no dust or smoke; are easily lghted and extinguished at will, and possess no dirty flues, being readily cleansed in consequence.

To give good results the gas stove should be fitted with a flue connected with the outside air, through which the smell of cooking and any fumes may pass away; they should be double cased with an interlining of non-conducting material, such as asbestos, to prevent loss of heat: the interior should be enamelled, and all

parts removable for cleaning purposes; a good griller is a necessity. Utensils can be of lighter make than those used for a range.

MANAGEMENT. Start heating the oven fifteen to twenty minutes before use so that it may be thoroughly heated; after the food is put in, lower the flame; and when the food is nearly cooked, the oven may be turned off, the heat being retained for quite twenty minutes. Soot, being a non-conductor of heat, all utensils must be kept clean, in order that a minimum amount of gas may give a maximum amount of heat; when once brought to the boil a saucepan will require only a small flame beneath it to complete the cooking; all taps should be turned off before removing the saucepans from the fire.

A well-ventilated kitchen is necessary to prevent kitchen utensils becoming rusty from the

escape of steam.

Where the number of pans exceeds the number of burners on the stove, two or three may surround one burner which will keep them all boiling, or to economize the gas a sheet of iron may be placed on the top of the stove over one lighted burner, whose heat will quickly spread over the entire space of iron.

There is a wide choice of gas stoves, fitted with atmospheric or luminous burners, burners in the oven, or on the outside of the stove; and good work may be achieved with almost any kind if careful management be adopted and the stove is thoroughly understood.

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DAILY CLEANING. After cooking remove any grease from the top or from the oven with hot water and soda, drying the part thoroughly, and polishing the stove with the blacklead polishing brush.

WEEKLY CLEANING. Remove the iron bars from the top, wash and dry these as well as the gas rings with hot water and soda, taking care not to allow the water to run into the burners; remove and wash the oven fittings, scouring the enamel with a cloth wrung out of hot water and dipped in common salt. Replace all fittings, and light the oven for a few minutes to dry the inside, leaving the door ajar. Clean the enamel plate on the top in like manner, blacklead the iron parts, and polish the brass with a metal polish. Do not forget to wash and clean the tin at the bottom of the oven.

ELECTRIC STOVES. Electricity, although somewhat expensive, is an ideal cooking agent, being absolutely clean, giving an even heat, and emitting no smell, dust or smoke, while the loss in the weight of joints is less when cooked with its aid than by any other means. With intelligent care, the cost may be kept within reasonable bounds, the charge per unit for current being usually about Id., and a separate meter being installed for heating and cooking.

The ovens are padded with non-conducting, heat-retaining substances, so that a good deal of cooking may be done without waste of current

after the oven is brought to the desire, heat. The thermometer fixed on the door will indicate the exact heat, and the switch by aid of which the oven lamp is manipulated is placed on the outside, which obviates the necessity of opening the oven door.

The utensils employed with the electric cooker should be quite flat at the bottom, in order that they may come into contact with the hot plate. Saucepans with a bright surface will not radiate the heat like black ones, and should therefore always be used with the electric stoves, and all utensils must be kept entirely apart for this particular kind of stove, and never appropriated for the kitchener or gas stove. Take especial care to switch off the current when the cooking is finished, and so avoid waste.

TO CLEAN THE ELECTRIC COOKER. Turn off the main current, and wipe the top of the stove and inside the oven, with a cloth wrung out of hot water and soda; wring the cloth tightly to avoid applying it too wet. Rub the top of the stove with emery paper, but do not polish the hot plates, which will only need an occasional rubbing with a little salad oil, thus keeping them clean though black. Avoid touching the wires of the grill, which are fragile and may be damaged; also clean the stove while still hot so that it may dry thor oughly during the cooling of the oven.

OIL STOVES. Porntable oil stoves are useful for camping out or in dplaces where no gas is laid on,

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also for summer use when it is sometimes inconvenient to light the kitchener.

Various patterns are obtainable at all sorts of prices, made with or without ovens, and with wicks or asbestos rings for burning the oil. Oil stoves well constructed and kept clean will act as excellent cookers, and will neither emit smoke nor smell. This method of cooking is considered at least 20 per cent cheaper than any other.

MANAGEMENT. The stoves must be kept scrupulously clean, with wicks well trimmed. These will require renewing every three months if in constant use, and when lit the flame must be left low at first, and the ventilators opened; it is well to light the lamps a quarter of an hour before the stove is needed for cooking.

CLEANING. The lamps require the same treatment as an ordinary oil lamp, and the stove part is blackleaded once a week.

THE FIRELESS COOKER. Much used in Sweden, Norway, and America, the principle of the fireless cooker is to retain heat which has already been established. Among its advantages may be mentioned, labour and time saving, the food cannot burn and retains its full flavour, while jars and saucepans do not become black, and give no trouble to clean; it is suitable for most foods; and it requires very little gas or coal fire to start it in the first instance

The initial outlay is but small, a fireless cooker, complete with saucepans, costing from £2 upwards, according to size and make.

A HOME-MADE FIRELESS COOKER. Take a good strong wooden box (a Tate's sugar box will answer the purpose) and fix hinges to the lid and a fastener to keep it closed; line the inside of box and lid with asbestos paper fixed with a few small tacks; fill the box tightly with hay; make a cushion of ironing felt to fit the box, and fill it with ground cork. Newspaper covered with felt or flannel may be used instead of the asbestos sheets.

MANAGEMENT. Using saucepans or fire-proof jars with tightly fitting lids, bring all the foods to a boil and cook for a short time over a gas or coal fire; pack the utensils without removing the lids in the box of hay, covering them with the prepared cushion; close the lid of the box and leave the food to cook.

The time required for the process will depend largely upon the kind of food, but usually from $2\frac{1}{2}$ to 4 hours is enough. Pulse foods must be soaked in the ordinary way before commencing to cook them.

Shake the hay frequently and sometimes place in the open air, adding a fresh supply when it becomes thin; soiled hay should be removed from the box at once.

For camp cooking this method is excellent, pits dug in the ground often taking the place of boxes.

CHAPTER XIII

THE CLEANING OF KITCHEN TINS AND SAUCEPANS, ETC.

PON the cleaning of cooking utensils depends to a large extent the good health of the family as well as the satisfactory and successful preparation of foods; too much caution, therefore, cannot be exercised in the faithful discharge of this important duty.

Saucepans, without whose aid cooking would be a difficult task, may be made of iron, steel, copper, brass, aluminium, tin, nickel or earthenware.

Of the first class, wrought iron saucepans are more durable, heavier and not so brittle as the cast iron variety. Iron, after the roasting and smelting of the ore, is termed cast iron or pig iron from the name of the mould in which it is cast. During the process the smelted iron absorbs a portion of the carbon of the fuel, which renders it brittle. The carbon and other impurities are eliminated by further processes, the

result being wrought iron, the strongest of all metals.

When choosing iron saucepans, note that they are lined with tin or enamel to prevent rust and discoloration of food. This also gives a better appearance to the pan. Handles with grooves to prevent slipping, secured to the saucepan by a deep socket which is part of the pan, with rivets which will hinder the detachment of the handle, and closely fitting lids, are necessary adjuncts to the well-made article. Large saucepans should be supplied with a loop handle on the opposite side, to facilitate lifting, and to take the strain off the long handle.

CARE OF IRON SAUCEPANS. They must be kept scrupulously clean, never put away damp, and handled carefully since cast iron, if dropped, will most likely crack. They should never be left empty on a hot stove, and should be filled with water directly after use; the outside when shabby may be reblacked with Berlin black.

CLEANING. When the saucepan has been used for starchy food, steep it in cold water to remove the particles adhering to it, but after use for greasy food, steep it in hot water and soda. Wipe the outside with paper, taking care to get rid of the soot, which is a non-conductor of heat; an old blunt knife is useful for the purpose.

After washing the inside and outside thoroughly with very hot water and soda, using a saucepan brush, scour with soap and sand. Rinse, wipe

and put the pan in a warm place to become thoroughly dry. Place it on the shelf in such a position that the air may have free access to the inside.

Saucepans used for onions or highly flavoured foods need to be rinsed in hot water to which a small quantity of vinegar has been added to remove the smell, or they may be unpleasant when next used.

Useful stands for holding saucepans placed one above the other may be purchased; they are perhaps more convenient than shelves. A new kind of saucepan is made with a coating of tin inside and outside, with the bottoms ground very flat, so that they may come into direct contact with the heating medium; in cooking by electricity, this is particularly necessary, or a waste of current will be incurred.

For rusty saucepans, half fill the saucepan with potato peelings, adding one teaspoonful of soda and sufficient water to cover the peelings and boil for 1½ to 2 hours, according to the amount of rust present and the length of time it has adhered to the pan.

TO STORE IRON SAUCEPANS. Clean and dry thoroughly, grease them inside and outside with fat in which there is no salt, wrap in brown paper, and store in a dry place.

STEEL SAUCEPANS. These are very durable. but care must be taken to see that they are welded all in one piece, and tinned to prevent the

discoloration of food cooked in them, as steel rusts very readily; tightly fitting lids of course, are a necessity to hinder the entrance of smoke from the open fire, or the escape of steam which may be needed.

To clean them, follow out the directions already given for iron saucepans, but in the scouring, work in a circular way, always keeping in one direction. After drying the pan thoroughly, polish the outside with dry whiting and leather.

COPPER SAUCEPANS, although usually more expensive than iron and steel, are yet a decorative addition to the kitchen, if properly cared for. They should be tinned or silver lined and seamless, with flat handles riveted through the pan; the handles are usually made of steel, as copper, being a great conductor of heat, would be unpractical for the purpose; copper sugar boilers are frequently made with wooden handles. A good copper pan should last for many years with fair treatment, and may be patched should it wear thin.

To Clean: Wash with hot water and soda, scouring the inside with soap and sand, and the outside with a mixture of sand with vinegar. Rinse immediately in hot soapy water, before the copper has had time to retarnish; dry thoroughly, polishing the outside with dry whiting and a leather.

It is highly important to keep copper utensils absolutely clean, or there may be danger of verdigris poisoning.

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NICKEL SAUCEPANS are made of rolled or solid nickel, the handles being riveted right through to the pan. Wearing white all through, they do not need re-tinning, and for electric cooking or sweet making these saucepans will be found excellent.

To clean: Wash in hot water and soap, rinsing in plain hot water, and drying thoroughly. Polish the outside with dry whiting and a leather.

ENAMELLED SAUCEPAN3, composed of wrought or cast iron of various thicknesses, and enamelled inside, should be chosen of as good a quality as possible, the cheaper kinds being liable to chip and introduce the enamel into the food. They should be examined from time to time to see that the enamel is fast

Cleaning: Wash in hot, soapy water, removing stains and burn marks with either coarse salt, crushed eggshell, or powdered pumice; rinse the pan and dry thoroughly. Soda or sand should be avoided as cleaning mediums for enamelled saucepans, since it takes off the polish, and tends to crack the enamel.

ALUMINIUM, a constituent of alum, forms a white metal of pliant nature, which will alloy with most metals; it is a highly useful conductor of heat and electricity, and resists the action of the air, and will not therefore rust nor tarnish.

Saucepans made of aluminium are light, durable and unableakable, possessing no tinning

which is liable to wear off. They may be procured in many qualities, but it is wise to choose a fairly solid article, which although slightly heavier is more lasting.

To clean: Wash in hot, soapy water; rinse, dry and polish the outside with whiting and a leather. Avoid the use of soda, which will turn the metal black.

FIREPROOF CHINA SAUCEPANS. When new these must be seasoned by boiling them in salt and water before using them for cooking, otherwise they may impart to the food any earthy flavour remaining from the manufacture. They may be purchased in various patterns, are light and easily cleaned, the insides being glazed, and frequently the outsides also. Heat is retained for a long time in them, and they may be used for the oven or over the fire. They should be heated gradually for the first two or three times, and the bottom of the saucepan should be dry before using. Although easily broken by the careless user, they are inexpensive to replace, and when employed with gas or electric cookers, should last a long time with reasonable handling. When taking them off the fire, care must be exercised not to burn the hand; wooden handles are sometimes fitted to the saucepan, earthenware handles will become very hot.

To clean: Wash in hot water and soda; rinse and wipe dry, scrubbing the outside if dirty.

BLOCK TIN, the product of the ore which has

been subjected to various processes, is the material from which fish kettles and steamers are usually made. They are rather expensive, but low-priced goods of this type are not economical, being apt to come to pieces if the metal is too thin.

To clean: Wash in hot water and soda, scouring with soap and sand; rinse and dry thoroughly, placing the articles upon the rack over the fire until perfectly dry. Polish the outside with dry whiting and a leather.

PRESERVING PANS of copper, brass, aluminium or enamelled iron must be kept very clean and free from discoloration; if composed of unlined copper or brass, special care must be taken to guard against verdigris.

Clean in the ame manner as saucepans of

the various kinds of metal.

KETTLES of a good medium weight in proportion to the size are best, the thin kettles wearing out too soon, and the very heavy ones occupying too much time in boiling. Kettles may be made of block tin, tin, copper, brass, enamelled iron, or tin with copper bottoms; they vary in price according to the size and quality.

CARE OF KETTLES. Always see that water is in them when standing on the stove; avoid leaving them on the hot plate all day, a habit which will aid in wearing them out. Clean the

outside according to the method laid down for saucepans of the same metal, and keep the inside free from "fur" which acts as a non-conductor of heat.

FURRED KETTLES. Fill kettle with cold water, add two tablespoonfuls of sal ammoniac, and boil for five minutes, throw away the water, refill kettle, and boil up again. After this the kettle will be ready for use.

FRYING PANS. Clean in the same manner as iron saucepans.

OMELET PANS. Do not wash, but wipe out with soft paper after use. If the omelet pan has been used for other cooking it should be "seasoned" or the next omelet made in it will be likely to stick to the pan.

TO SEASON A'PAN. Rub it well, over the fire, with salt, using paper; after throwing away the dirty salt apply a little lard or butter, and wipe it again with soft paper, when it will be ready for use.

Omelet pans may be procured of various materials, fire-proof china, aluminium, seamless steel, copper, enamelled, and pure nickel being the most generally selected.

MINCING MACHINES. Unless kept scrupulously clean, these are apt to become both unpleasant, and veritable disease traps.

To clean. After use let a piece of bread pass through the machine, which has the effect of removing any particles of meat or fat which may remain behind; take the machine to pieces, and wash all parts thoroughly in hot water and soda, after which rinse, wipe and place on a rack over the fireplace to dry. Store the machine in a box to keep it free from dust, and to prevent any of the parts from being mislaid.

KITCHEN UTENSILS. These are sometimes designated "brights" or "tins," and are both unsightly and unwholesome if allowed to remain dirty.

To clean. Wash in hot water with a little soda, and scour with soap and sand. Rinse and dry, polishing the outsides with dry whiting and a leather.

METAL MOULDS. In cleaning these avoid the use of sand, which will remove the tinning; wash them in hot soapy water, rinse, dry and polish with dry whiting and a leather. Soda is not a necessity in this case.

NEW TINWARE. Before attempting to use new tins for cooking purposes, rub them over with fresh lard, and place in the oven until thoroughly heated, after which the lard may be rubbed off with soft paper. Tins treated in this way will seldom rust.

RUSTY TINS!" To restore rusty tins to their

original brightness rub them with a rag dipped in sweet oil and whiting, after which they may be cleaned and polished in the usual way.

Where there is a damp kitchen, or a gas stove constantly in use, the tins are liable to rust; it is advisable to rub the ware not in daily use with a slightly oiled rag.

GALVANIZED BATHS, PAILS, ETC., iron goods coated with zinc are misnamed, since they are in no sense affected with galvanism. The zinc, however, retards the effect of dampness, and to clean such goods it is necessary to scrub them with a brush, using hot water, soda and soap, or a scouring mixture. Wipe them dry and polish with turpentine and bathbrick or paraffin and salt, drying them thoroughly and exposing them to the air.

REFRIGERATORS. To clean: Remove the shelves, cleaning both them and the inside of the refrigerator with a scouring mixture, rinse with hot water and wipe very dry. Wash the frame with warm, soapy water, in which borax is dissolved in the proportion of two tablespoonfuls to three pints of water; rinse well with warm water; wipe and leave it open until perfectly dry.

The felt or baize in the refrigerator may be washed from time to time with warm soapy water, employing a nailbrush for the scrubbing.

DISH COVERS are manufactured from electro

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plate, tinne'd steel, block tin, Britannia metal, aluminium, tin, nickel and wire.

To clean. Wash the inside immediately after the cover has been used, with a cloth wrung out of hot water in which a little soda has been dissolved, and wipe dry. Clean the outside with moistened whiting and polish with a cloth, afterwards with a leather. Hang the covers securely in the kitchen where they will not fall, as they become dented very readily if carelessly treated.

For wire covers, brush the dust away with a soft brush, rinse in cold water, wipe dry, and put in the open air.

The prices of dish covers, of course, vary with the quality of the material used, and the sizes; they are usually sold in sets, and when selecting the size for any particular dish it must be borne in mind that a cover at least two inches smaller will be needed; thus a 10-inch cover will fit a 12-inch dish.

BAKING TINS. These will become very black from constant use in the oven.

To clean. Boil the articles in strong soda water for one to two hours, after which scrape the black away, and scour with soap and sand or scouring mixture; rinse and dry. It is impossible to preserve a bright appearance with baking tins, but when clean they are free from dirt both to touch and sight.

MEASURES of block tin are obtainable either singly or in sets, from one gill to one quart size.

To clean. Treat them in the same way as other tins, taking great care to dry them thoroughly, or they will become rusty.

Saucepans and tins may be re-tinned when the original covering has worn off, but measures are so cheaply renewed, that the cost of retinning these is nearly as much as that for a new set.

Burnishers, specially prepared for scouring purposes, are useful aids to the work, and metal sponges for cleaning pots and pans (procurable for a very few pence), metallic gloves for scouring saucepans, and steel or bass saucepan brushes not only render work easy, but spare the hands and the time of the worker.

CHAPTER XIV

THE CLEANING OF WOODEN UTENSILS; FLOORS; STAINS ON WOOD, ETC.

Of the many kinds of wood used throughout the house for the manufacture of the various necessary dome tic articles, oak, elm, teak, beech and pine (deal) are those which are chiefly employed in making cooking utensils.

All wood should be well seasoned to evaporate the sap which, if present, will cause shrinkage,

warping, and frequently decay.

PASTRY BOARDS. The wooden utensil of the kitchen which is perhaps uppermost in the mind is the pastry board. This is to be made of well-seasoned pine, planed very smoothly, as free from knots as possible, about \(\frac{3}{4}\)-inch thick, cut in one piece with crossway ends, which are intended to add to the strength of the board, and prevent warping. These crossway ends are fitted to the board by dovetailing or with wooden plugs,

iron nails being unpractical for goods requiring constant washing, as they are kable to rust and wear away the wood.

The prices of pastry boards are determined, of course, partly by the size of the board and partly by the quality, but they may be purchased

at figures to suit all incomes.

CHOPPING BOARDS are generally made of oak or elm, since they require a heavier wood than pastry boards. They are 1½ to 2 inches in thickness, and, as their name implies, are used for chopping many kinds of food, and so save the pastry board.

CHOPPING TRAYS, made after the manner of the pastry board, but with addition of a rim at three sides to prevent the food from falling off the tray, are more difficult to clean, and are perhaps, not to be recommended on this account.

CHOPPING BLOCKS do not often form part of the furniture of the ordinary kitchen, being very thick and unwieldy, made from one "block" or section of a tree, and mounted on three or four legs, with an iron band around the head, to give it further strength.

ROLLING PINS are manufactured from hard wood such as beech or box wood, or sometimes lignum vitæ, a very hard wood obtained from the Guaiacum tree, a native of the West Indies and

tropical parts of America. The wood is of a pale yellow colour near the exterior with blackishbrown at the heart, and in weight is heavier than water.

Rolling pins are obtainable in three shapes—straight, spindle and revolving—the straight pins being those in general use, since they will roll more evenly than the spindle-shaped pins.

Porcelain rolling pins, although more readily broken, are to be recommended on account of their coolness.

The prices at which rolling pins may be bought vary with the kind of material used, and the length.

SIEVES, made in two parts—a wooden frame, usually of beech, and a drum of wire, hair or silk—may be selected with meshes of three sizes—fine, medium and coarse. Wire sieves are generally of brass, copper or tinned iron wire; the first two, although more expensive at the outset, will last longer, not being so liable to rust, but need to be kept very clean in order to prevent the formation of verdigris.

In choosing a sieve take note that the frame is firmly fixed with rivets, and that the ends well lap over and the drum is well stretched.

SPOONS are made from deal, and can be obtained in various shapes and sizes.

SCOTCH HANDS or butter pats, made of boxwood, are used for rolling butter into fancy shapes. These, with all other wooden articles used for

butter, need to be treated differently from the method employed when cleansing general wooden goods.

To clean. Wash in cold water, and scour with salt; put them into boiling water, wipe thoroughly, and place in a current of air to thoroughly dry. Before using them for butter, allow them to remain for a short time in cold water, or the butter will stick.

SAUCEPAN STANDS OR TRIVETS may be made of metal or wood, and serve to prevent many a dirty mark on tables or other places where saucepans are likely to be put down. The wooden ones are generally triangular in shape, with each piece dovetailed at the corners, and fixed with wooden plugs. (See Diagram 21.)

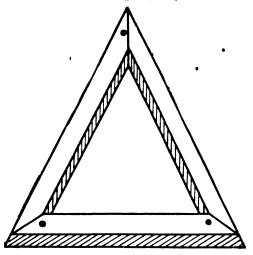


DIAGRAM 21. WOODEN SAUCEPAN STAND.

In addition to the actual cooking utensils, there are many other articles necessary to the daily routine of the kitchen, which, being made of wood, require the same careful treatment to secure cleanliness, economy, and the preservation of hygienic conditions. Among these may be mentioned kitchen tables, plate racks, clothes horses, chairs, dressers, wooden bowls and draining boards for the scullery.

TABLES of deal should be well made and strong, rather heavy for the size, and fitted with a long drawer at the end. The tops must be quite level, particularly in the case of those which serve as ironing tables, the legs firm and even, and the whole designed with due regard to durability and utility. A shelf beneath the table, frequently met with, is hardly a happy addition as a general rule, since it is apt to get in the way while the cook is at work, and by a careless maid, may be used as a storing place for all sorts of rubbish.

CARE OF WOODEN UTENSILS. Keep them very clean and use them only for the purpose for which they are intended; never scrape them with a knife, for this will roughen and destroy the surface; with the exception of sieves, do not leave wooden utensils to soak in water, and store them always in a dry place.

TO CLEAN: All wooden articles which can be scrubbed, and where the surface is not painted

and varnished, may generally speaking undergo the same treatment to free them from dirt. Having removed all particles of food, wipe the articles over with a flannel wrung out of cold water, after which scrub them well, using hot water, soap, or a "scouring mixture" and applying these with a scrubbing brush. Scrub in a direction with the grain of the wood, to allow the bristles of the brush to get well into it; scrubbing across the grain invariably leaves dirt behind and is but wasted labour. Do not forget the edges of the utensils.

After scrubbing, wring out a flannel in hot water, and wipe away the dirty soap, rinsing in clean cold water, and wiping as dry as possible. Finally place all articles in a free current of air to thoroughly dry, taking care not to place wood near the fire while wet and so allowing the heat to warp it.

Soda, having a tendency to discolour wood, is not a practical scrubbing medium, except in the case of chopping boards which are greasy and need something of the kind to remove the grease. Pieces of dough which have dried hard upon the boards may be softened with cold water applied a short time before the cleaning is proceeded with.

Wooden articles should not be left dirty for any length of time; cleaning them as soon as possible after use will save much time and energy, and will preserve the colour of the wood.

A SCOURING MIXTURE, prepared after the

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following method, is excellent for all practical

purposes:

Take 12 oz. of soft soap; 12 oz. of silver sand; 12 oz. of whiting, and 3 pints of water. Place the ingredients in an old iron saucepan, bring to boiling point and boil for twenty minutes to prevent the sand from becoming precipitated, and stirring the mixture frequently during the process. Pour into a clean jar and use a little of this mixture on the scrubbing brush, instead of soap.

CLEANING SIEVES. After having removed as much of the particles of food as possible, soak the drum in cold water before washing it. Use a brush to clean the drum, paying special attention to the groove where the drum joins the frame; a wooden skewer will aid in removing anything therefrom which cannot be dislodged with the brush.

HAIR SIEVES. A small, fairly soft brush will be needed to scrub these, so that the hair may not be injured. The frame should be cleansed after the manner adopted for other wooden utensils, and after the sieve has been wiped as dry as possible, it should be put into a free current of air.

SCRUBBING FLOORS. Open the windows of the room at the top and bottom, and sweep the floor to rid it of dust.

Start scrubbing at the point furthest from the

door, to obviate the necessity of walking over the still wet boards when finished, in order to get out of the room. Wring a house-flannel out of hot water, and wet only a small part of the wood at one time, scrubbing as far as possible with the grain of the wood, which method is not only quieter, but removes the dirt without any waste of labour; use a good scrubbing brush, fairly hard, and remove the dirty soap after scrubbing with the flannel, rinsing it frequently in the hot water. See that each part scrubbed overlaps the last piece completed, or irregular strips of clean and dirty boards will appear; also take care to change the water often, and thus ensure the floor being a good colour when dry. Wipe the scrubbed parts as dry as possible with a rubber as the work proceeds, and leave the windows and door of the room open until the boards are perfectly dry. It is not necessary to rinse with cold water.

Good soap or a scouring mixture should be used; carbolic soft soap is excellent and sanitary for use upon floors, although many may prefer the hard carbolic soap or plain yellow soap. The scouring mixture previously recommended for wooden utensils is also good and may be prepared with carbolic soap instead of plain soft soap.

STAINS ON WOOD. Stains are more successfully removed, and with less fear of injury to the article upon which they appear, if dealt with immediately after the damage occurs; if this is

not possible stronger agents may be required to dislodge them, and the process may have to be repeated two or three times before success is attained. It is well, however, to always try the simplest remedy first, afterwards having recourse to others should this prove inadequate.

FOR INK. Soak up the ink with blotting paper as quickly as possible, and rub with a rag dipped in vinegar and salt, or with lemon and salt, rubbing with the grain of the wood, and scrubbing the place in the usual way after the stain has disappeared.

OLD INK TAINS. Rub the stain with a pad of rags tied to a stick and dipped into a solution of salts of lemon or oxalic acid, prepared with enough boiling water to make the crystals liquid. Scrub thoroughly, rinse and dry the wood.

Great care must be taken in using the agents in this case; being poisonous, they must not be allowed to come into contact with any food, or utensils used for food, or be placed within the reach of children or domestic animals.

For very old ink stains impossible to remove by these methods, planing the board has frequently to be resorted to.

PAINT. Moisten a rag in turpentine, and rub until the mark has disappeared; after which scrub in the usual way.

RUST. Any one of the following agents will

usually remove rust stains from wood, if applied in the direction of the grain with a pad of rags tied upon a stick:

Vinegar and salt Lemon juice Oxalic acid Salts of lemon Scrub in the usual way after the application of one of these, as soon as the rust is removed.

GREASE. If a large quantity of grease be spilled, pour cold water at once upon it to harden it and prevent soaking into the wood. It may then be removed with a blunt instrument, after which the place should be scrubbed with hot water in which there is a little soda, with sand sprinkled upon the wood. Rinse and dry.

For a small quantity of grease, wipe it up immediately, scrub the place in the usual way, using a little soap, soda and very hot water. Grease will yield to ammonia sometimes, if the

scrubbing will not remove it.

OLD GREASE STAINS. Prepare a mixture of Fuller's earth and water or whiting and water; spread it over the grease stain and leave for twenty-four hours, after which scrub in the usual way, using a scouring mixture instead of soap. If the mark will not yield to this treatment, the following recipe may prove efficacious:

8 oz. of Fuller's earth (the coarse quality).

4 oz. Pearl ash (potash burnt to a red heat to make it whiter and purer).

13 pints of water.

Boil these ingredients quickly in a saucepan, apply to the stain while hot, and leave for twenty to twenty-four hours, after which scrub the place, repeating the treatment if not successful the first time.

UNKNOWN STAINS. Apply ammonia, which will not injure the wood, even if it does not remove the stain,

TAR. Soften first with grease, and then rub with a rag dipped in turpentine, after which scrub the place in the usual manner.

STAINED FLOORS should not be scrubbed, or the staining will soon wear off. In the case of a water stain, dust the floor daily, and keep it clean with a frequent polishing with beeswax and turpentine. For a floor which has been varnish stained, the daily dusting is usually enough, until the gloss wears off when it may be polished with a good floor polish.

MENDING WOODEN UTENSILS. Even wood is not unbreakable, and not infrequently wooden utensils are carelessly thrown away owing to ignorance as to the method of mending them at home. For slight damages, glue will generally be found a sufficient remedy, but for heavier breakages, it is often necessary to have the article repaired with the aid of rivets and screws.

Glue may be used effectively in the following way:

Notice how the broken pieces fit together; apply a thin coating of glue to each piece, using a fine brush and working quickly, as the glue soon dries; press the two edges firmly into position, wiping away any glue which may ooze out with a rag wrung out of hot water. When the pieces have been replaced in this way, bind the article tightly with tape or string, and leave till thoroughly dry.

TO PREPARE GLUE. French glue should be used for mending wooden articles, and a good quality chosen. Break the glue into small pieces and place in the glue-pot with a small quantity of cold water, leaving it to soak for about twelve hours; then add sufficient water to cover it; fill the outer saucepan of the glue-pot with water and stand the whole in a gentle heat until the glue is quite dissolved.

Glue should be applied while very hot, or the task will become difficult owing to its tendency to dry before the work is finished. Beer is sometimes used for mixing glue instead of water, and is said to render it more adhesive.

It is a good plan to have a piece of wire fixed across the top of the glue-pot, upon which to remove superfluous glue from the brush while working. Speed and care are two essentials which go a long way towards making the work of glueing successful.

CHAPTER XV

HOUSEHOLD WORK

DAILY AND WEEKLY CLEANING OF BED-ROOMS; TO MAKE A BED, Etc.; DAILY AND WEEKLY CLEANING OF SITTING ROOMS

THERE is a right way and a wrong way of doing most things, and this is especially true with regard to the cleaning of the various parts of the house. Methodical arrangement and systematic carrying out of this work will be found the least laborious, quickest in the end, and most satisfactory in result. Since it is a well-known fact that upon the cleanliness of the living apartments depend largely the health and comfort of the family, it will be readily understood that it is highly important to give particular attention to this department of housework, not only with the view of promoting these blessings, but also to preserve furniture, and other possessions against that depreciation which is ever encouraged by neglect and dirt.

The sleeping apartments, in which so considerable a proportion of time is spent in civilized countries, will claim the first consideration, and a regular daily round of duties, with a weekly "turning-out," should be sufficient to keep them in good order.

THE DAILY CLEANING OF BEDROOMS. Before breakfast the windows should be opened at top and bottom, and the bed stripped, all coverings being removed separately, shaken and placed lightly over two chairs, the ends being kept off the floor, and the tops of all articles placed together.

The mattress of the bed should be turned completely over, from side to side as well as from top to bottom, and left arched upon the bed to allow the air to reach all sides. Feather beds must be well shaken to prevent the formation of lumps. Leave the doors of the room open, and allow the beds to "air," for at least one hour before re-

making.

After breakfast, empty, rinse and wipe dry all bedroom ware, not forgetting the water bottle, which should in addition be polished before refilling with clean water. Dry the top of the wash-stand, dust the woodwork, replace all the ware, arrange the towels neatly and see that the jugs are filled with water.

TO MAKE THE BED. Straighten the mattress and spread the under blanket smoothly upon it, Take the undersheet, right side uppermost, and with the broad hem at the top, allow sufficient

length to comfortably cover the bolster, unless a bolster case be used, when the top of the sheet will be smoothly tucked in at the head of the bed; shake the bolster and pillows before placing them in position; the openings of the pillows should be away from the ends of the bed. Next the upper sheet, wrong side upwards with the broad hem at the head, should be tucked in at the foot of the bed, sufficient length being left at the top for turning over the blankets, which must be arranged to allow the tops to reach halfway up the pillows, thus avoiding a thick turnover, which is heavy, hot and uncomfortable; tuck the blankets in neatly at sides and foot, and double the upper sheet back over them at the head. Lastly the quilt or bed-spread should completely cover the whole and hang down to a length of about 12 to 14 inches over sides and foot of the bed, the top being smoothly tucked in over the head of the pillows. If there are curtains fitted to the bedstead, these may be neatly and gracefully arranged over the pillows, or left to hang loose as desired. Each covering should be tucked in separately, to give the bed as flat an appearance as possible. The down quilt is generally folded and laid across the foot of the bed, or put away in a drawer with moth preventive during the summer months.

THE ROOM. Every morning remove the pieces from the carpets with dustpan and brush or a carpet sweeper; dust and arrange the room, leaving the windows open and doors shut.

EVENING WORK. The blinds should be pulled down, quilt folded back or removed from the bed, the bedclothes turned down to the lower edge of the pillows, attention given to the washstand and towels, and the room left tidy, all articles being put away which will not be needed for the night. Hot water should be left in all the bedrooms before the maid retires for the night.

WEEKLY WORK. Before breakfast, follow out the same programme as for the daily cleaning, but after breakfast, collect all the pails, brooms, dusters and cleaning apparatus which will be required, and take them upstairs to the bedroom which is to be "turned out." Lower the blinds, dust them well, and draw them up again, remove the small curtains, shake and pin up the long ones, or place them in curtain bags prepared for the purpose.

If possible it is advisable to take the bedroom ware into the bath room, but if not, wash it, wipe the top of the washstand, replace the ware and cover it with a dust sheet, taking the water-bottles away to be cleaned with a suitable pre-

paration for removing the stains.

Thoroughly brush the mattress, paying special attention to the binding and tufts; dust the entire framework of the bed, taking the brush well into the woven wire mattress, or using a wooden skewer covered with a rag, to dislodge the dust; shake and air the piece of material which overlays the wire mattress, and make

the bed, covering it with a dust sheet in place of the quilt. Dust small ornaments, books, etc., and place them upon the bed, and cover with a dust sheet; remove the small pieces of furniture from the room, dusting the large pieces and covering them up with dust sheets. Take the mats away to be shaken in the open air; remove any clothes hanging in the room, or lay them upon the bed under the dust sheet; polish and remove fender and fireirons. The sweeping of the carpet may then be done, the floor surrounds cleaned and the dust taken away to be burned. The method of cleaning the carpet is explained in Chapter XXIII.

While the dust is settling in the room, the rugs may be shaken, the china washed, the fireirons with fender cleaned if not previously attended to, and the small pieces of furniture polished.

Returning to the room, blacklead the grate, clean the windows (after the method described in Chapter XIX), dust and polish the floor surrounds; remove the dust sheets, and dust every part of the room, not forgetting the unseen parts, such as tops of doors, cupboards, drawers, etc., and do not be afraid to use the finger tips for reaching the smaller crevices; dust the pictures and walls, and polish the mirrors; after replacing everything in the room, put on the quilt, fill the water bottles and jugs, adjust the curtains and blinds, and leave the room with windows open and door shut. Dust sheets must be shaken outside, folded and put away.

OCCASIONAL WORK. In the bedrooms it is necessary to pay attention to the walls and paintwork occasionally. Sweep the walls and cornices thoroughly, and wash the paint; also scrub the floor boards if unpolished; remove and beat the carpets, and polish the large furniture.

Since bedsteads and bedding are the most important items of furniture in the bedrooms, a few words as to the selection and care of them may prove of value to the young housewife.

BEDSTEADS are usually manufactured from wood, brass or japanned iron, the metal ones being considered more sanitary than the wooden variety. Care must be taken to choose bedsteads which may be readily cleaned.

WIRE MATTRESSES, made of steel wire chains, are generally fitted with screws at the end for the purpose of tightening the wires when necessary; wooden frames, upon which to mount the wire springs, are lighter, but the mattresses are obtainable made entirely of metal.

THE TOP MATTRESSES are made of hair, a mixture of hair with wool, white wool, flock or fibre. A good hair mattress, although more expensive at the first outlay, will be found economical in the long run; with ordinary care it will last a very long time, and upon becoming flat and hard from constant use, may be cleaned, the hair recurled and a little more added to the original mattress. It is false economy to purchase

very cheap mattresses, which never give satisfaction.

TO CLEAN A HAIR MATTRESS AT HOME. After noticing carefully how the tabs are sewn on, and the sides quilted, remove the tabs, and if good, wipe and put them aside to be used again. Open one end of the mattress for the removal of the hair, which should be put into a bath of lukewarm water to which has been added dissolved soap to form a lather, squeeze the hair in the water until clean, afterwards rinsing it in warm water, and finally in cold water; squeeze it as dry as possible and place in a clothes basket out of doors to dry; after two hours it may be spread out on paper in the sunshine, or be placed in a warm spot in the kitchen until it is perfectly dry. Wash, starch and iron the ticking, waxing the inside all over with beeswax; replace the dry hair; sew up the end of the mattress, re-fix the tabs, tying them tightly with string, and quilt the sides to prevent their bulging in use.

HAIR AND WOOL MATTRESSES. These are comfortable for a time, but as the hair has a habit of binding itself round the wool, lumps are formed, and there is nothing for it but to have the mattress taken to pieces and re-made.

WHITE WOOL MATTRESSES also have a tendency to form lumps, and are not so springy as hair mattresses; they are manufactured from the short wool from the blanket factories, which is useless for weaving purposes.

FLOCK MATTRESSES, although cheap, are not to be strongly recommended, the shortness of the flock rendering it liable to readily become matted together into lumps; they should be made from white flock, the sale of black flock being prohibited by the Government in this country.

FIBRE. Mixed with hair, Algerian fibre is frequently employed in the manufacture of cheaper mattresses, and although good is, of course, not so serviceable as pure hair. It is sold under the name of "Lyxhayr."

OAT CHAFF is useful for stuffing mattresses for young children, and the chaff can be renewed easily when soiled.

Mattresses vary much in price according to the size, quality, and the kind of stuffing used. They should be protected with strips of calico, or holland tacked along the sides to keep them clean. These are called "binders" and require washing from time to time. A better plan is to completely cover the mattress with a large calico bag fastened at one end with tapes.

PILLOWS AND BOLSTERS. The contents of pillows and bolsters, generally feathers or down, need to be chemically treated to destroy any animal matter. Daily shaking is necessary to prevent the feathers from clogging, and the ticking will require washing occasionally, when the feathers may be emptied into a bag until the

case is perfectly dry. Wax the ticking on the inside before replacing the feathers.

Bolsters may also be purchased stuffed with mill-puff, a substance obtained from the cotton plant. Under-covers of calico should be placed upon all pillows and bolsters, and the pillowslips should be made of linen or calico with fastenings of buttons and button-holes at one end. Bolsters are more comfortable if fitted with a separate cover, although they are sometimes rolled into the end of the sheet at the head of the bed.

DAILY CLEANING OF SITTING-ROOMS. Before breakfast the blinds should be drawn up and the windows opened at top and bottom. This done, remove and shake the table cover and rugs, and shake the cushions. In winter time the fireplace should be cleaned before breakfast, and the fire laid and lighted, care being taken to spread a hearth-cloth, with newspaper under it, before removing the ashes, or the carpet may become soiled. Upholstered chairs near the fireplace should be removed while the fireplace is being cleaned, and it is advisable to cover them with a dust sheet.

Where only one servant is kept, assistance may be given by the mistress or daughter of the house, by folding the tablecloth, rolling up mats, and drawing the chairs from the fire before going to bed. The pieces should be taken up from the carpet with a dustpan and brush or a patent carpet sweeper; the wastepaper basket emptied,

and the room dusted, care being observed to dust the highest articles first, such as pictures, gasbrackets, etc. If stained boards or linoleum surround the room, these should be polished before replacing the rugs and table cover. Plants and flowers may be attended to before breakfast if time permit.

WEEKLY CLEANING OF SITTING-ROOM. The method of "turning out" the sitting rooms is practically the same as that observed in the case of bedrooms, although a few particular points may be emphasized which will apply especially to the former.

Remove the tablecover, spreading a dust sheet in its place; dust all ornaments and small pictures, placing them on the table; beat the cushions out of doors, placing them also upon the table, and cover the whole with another dust sheet; dust and remove from the room as many pieces of furniture as possible. Be careful to take away all soot and ashes from the fireplace before beginning to sweep the carpet; when the sweeping is finished, allow the dust to settle and then clean the grate.

TO CLEAN A FIREPLACE. Spread the hearth cloth in front of the fireplace with paper underneath; remove the fender and fire-irons, remove the bars, take away the ashes, but reserve the cinders for future use; pass the flue brush up the throat of the chimney as far as possible, removing the register and brushing behind it,

afterwards take the soot up very carefully from the fireplace to prevent its flying about the room.

Blacklead the grate after the manner described in Chapter XII, cleaning the steel parts with emery paper, and the brass fittings with brass polish. Replace the bars, also blackleaded, clean the tiles by first wiping them with an old duster, afterwards washing with warm, soapy water, rinsing, wiping dry, and polishing with a dry cloth. From time to time the tiles may need to be rubbed with a little furniture polish or turpentine to keep them in good condition. Stains may be removed with a little "Sapolio" or "Old Dutch." When all is ready and clean, lay the fire, using the method described in Chapter XII for the kitchen range.

CHAPTER XVI

DAILY AND WEEKLY CLEANING OF BATHROOM, LAVATORIES, STAIRCASE, KITCHEN, DOOR-STEPS, BACK PREMISES

CLEANING OF BATHROOM. Open the windows daily at top and bottom; rinse the bath with hot water, wiping it dry, polishing the woodwork, if any, round the bath, and rubbing up the taps. Give the same attention to the hand basin, and wipe up all splashes of water from the floor. Dust the room, arrange the towels, and hang up the bath mat to dry.

THE WEEKLY CLEANING. Open the window, dust and roll up the blind; dust and remove the small furniture, and then sweep the room thoroughly. If the bath be of enamelled iron, wash it with soapy water, and rub it with a rag dipped in paraffin and salt; rinse the bath well and dry it.

If the bath be made of porcelain, wash it with

warm, soapy water, removing the stains with "Sapolio," "Old Dutch," "Vim," or a similar scouring agent; rinse and dry.

Hand basins should be treated in the same way and all brass fittings polished with a metal polish, nickel taps being cleaned with whiting and rubbed with a leather.

When these matters have been attended to, clean the window, and dust every part of the room thoroughly. Mats, if used, should be removed and shaken out of doors before starting to clean the room.

Polish all the woodwork round the bath with furniture polish, previously washing it if sticky; wash and polish the floor, and replace everything in the room, leaving the door shut and the window open.

Occasionally the walls of the bathroom will need to be swept, and the paintwork washed.

LAVATORIES. The windows must be kept open both by day and night to allow of free ventilation. Care should be taken to see that the pans are flushed with water the last thing at night and the first thing in the morning. The door should be always kept closed, and disinfectant sprinkled freely into the pan. The woodwork in the lavatories will need a daily dusting.

Once each week a more elaborate cleaning should be undertaken. Scrub the pan with hot water and soda; dust and polish the woodwork; wash the floor, polishing it if covered with linoleum, and provide clean lavatory towels.

FOR A DISCOLOURED PAN. Sprinkle it with a little spirit of salt and brush with the lavatory brush, afterwards flushing with water. The brush should be occasionally washed with hot soda water; it should be hung from the lavatory window or be kept in a small pail inside the lavatory.

Spirit of salt, being a virulent poison, requires great care in manipulating; it should always be kept under lock and key, away from the reach of children or domestic animals, and should not be touched with the hands.

HALL AND STAIRCASE. Every day shut the doors and open the landing window; remove the mats and take them outside the house to be shaken; sweep the stairs, removing the dust from each stair with a dustpan and brush; and using a whisk for the carpet part, and a soft banister brush for the paint work at the sides. Sweep the hall, removing and burning the dust.

While the dust settles, there will be time to shake the mats, which may afterwards be replaced in the hall. Do not forget to dust the stairs, balusters, handrail, pictures, gas bracket and furniture; in fact, everything upon which dust may lodge.

In small households, where there is little traffic upon the stairs, the carpets may need sweeping but once or twice weekly; they must, however, be dusted daily, although in large households the daily sweeping will be found a necessity.

WEEKLY CLEANING. Proceed as before, shutting the doors, opening the windows, removing and shaking the mats. Take out the stair rods, removing them to be cleaned elsewhere; sweep under and over the carpet on each stair, paying particular attention to the "eyes" for the rods. Thoroughly dust all the woodwork, polishing the handrail and furniture with furniture polish; clean the windows; wash and polish the hall floor if covered with tiles or linoleum, or polish only if it be made from polished wood; replace the mats.

Occasionally the carpets will need to be taken up and beaten, the walls swept, stairs scrubbed, paint work washed, and the balusters cleaned with furniture polish, but these need not be re-

garded as weekly tasks.

CARE OF THE HALL DOOR. Paint being liable to crack and blister if exposed to the heat of the sun, the hall door should be protected with a sun blind. Tick, composed entirely of flax, wears well and is readily cleaned, and will form an excellent material for the purpose.

The painted woodwork should be cleaned in the manner laid down for all outside paint work

in Chapter XXII.

Brasses will need a daily cleaning with brass polish, and the scraper should be rubbed daily with the blacklead polishing brush and treated with blacklead at least once a week. The railings and gate may be kept bright with an occasional rubbing with a rag dipped in paraffin.

DOORSTEPS. Stone doorsteps should be swept and then cleaned after the method described in Chapter XII for kitchen hearths, care being taken not to touch the door or railings with the flannel used for the hearthstone, or untidy white marks will appear. Should this happen, however, the marks may be removed when dry. From time to time it will be necessary to scrub the stone to remove all traces of old hearthstone; soap must not be used or the hearthstone will not dry successfully, and the step may become greasy and cause accident.

Another good method for whitening the doorsteps is to scrub the steps, using no soap, afterwards applying the following mixture evenly with a stiff brush. For the mixture dissolve I lb. of size in 3 pints of water, adding sufficient powdered whiting to make a thick paint. When the steps require repainting, if the mixture has become hard, add warm water, stir well, and it will then be fit for use.

MILK STAINS ON STEPS. To remove milk stains from stone steps, scrub with hot water and soda, and if this treatment is not successful cover the stains with a mixture of Fuller's earth and water, leaving it for twenty-four hours, and afterwards washing the steps in the usual way.

DAILY CLEANING OF THE KITCHEN. After the midday meal is the time usually selected for the cleaning and tidying of the kitchen; the fire is then low, and the range can be more

easily polished, blacklead in the form of a paste being substituted for the ordinary kind which is mixed with water, which would become dry before it was possible to obtain a polish, and so would give a grey appearance to the stove.

Having opened the windows and closed the doors, pile up the chairs and small furniture out of the way, roll up and remove the hearthrug to be shaken subsequently. Polish and remove the fender and fire-irons; make up the fire, sweep down the stove, and empty the ashpan, reserving the cinders for future use.

Sweep the floor and burn the rubbish; whiten the hearthstone, and replace the ashpan, fender and fire-irons.

Scrub the table, dust the room and return everything to its appointed place.

WEEKLY CLEANING OF THE KITCHEN. Open the windows, close the doors, and dust and draw up the blind, removing the short curtain from the front of the window. Cover the dresser with a dust sheet. Clean the flues, blacklead the grate, and lay the fire in the manner suggested in Chapter XII. Then, after sweeping the floor, scrubbing the dresser and cleaning the windows, the tins, coppers and brasses may be polished, the chimney-piece washed, tables and chairs scrubbed, and everything dusted and put away in the proper place.

The floor should be scrubbed, unless covered with linoleum, when washing in the ordinary way will be adequate treatment. Shake the rugs

and curtain, replace them, and adjust the windows and blind.

OCCASIONAL CLEANING, such as sweeping the walls, washing the paintwork, and turning out all the cupboards and drawers, may take place at longer intervals, but must not be neglected.

DAILY CLEANING OF THE SCULLERY. To sweep the floor, scrub the draining board, clean the sink and rub to the taps is all that is necessary to do in the scullery daily, other than leaving everything tidy and in its place.

WEEKLY CLEANING OF THE SCULLERY. Open the window, dust and roll up the blind, sweep the floor, scrub the copper lid and all wooden parts of the scullery such as the plate rack, foot rack, and drainer; clean the copper with paraffin and bath brick or with scouring mixture, and the taps with brass polish.

Thoroughly clean the sink and windows, re-

adjusting the blind.

If concrete, the floor should be scrubbed with hot water and soda, but soap, which will discolour concrete and make it slippery, must not be used.

DISCOLOURED CONCRETE may be remedied in the following way: Mix 2 oz. of chloride of lime in a bucket of water; make the floor very wet with the mixture and leave it for one hour, after which scrub the floor with hot water to which soda has been added. If desired concrete floors may be hearthstoned.

PARAFFIN spilt on stone floors may be removed by wiping up as much as possible with newspaper (which will make an excellent firelighter afterwards), and scraping as much bathbrick over the spot as will cover it, leaving it till the next day, when the bathbrick may be swept up, and the floor scrubbed as usual.

TO CLEAN THE SINK. This is a very important duty, and requires careful daily attention, so that the sink may be kept wholesome; if neglected, the sink may easily become a source of infection

Every day, scrub the sink with hot water and soda, rinsing first with hot water and then with cold, so that none but clean cold water remains in the siphon and pipes; wash the ciles with warm soapy water, then rinse and dry them. If the sink is of lead, scrub it with hot water and scouring mixture, rinse, dry, and polish with bath-brick.

A little disinfectant should be poured down the sink weekly, and stains upon the porcelain may be removed by rubbing with a rag dipped in paraffin.

THE HOUSEMAID'S CUPBOARD. Where it is possible, it is a good plan to set aside a special cupboard for the housemaid's use. The walls should

be lime-washed and fitted with shelves to hold the housemaid's box, buckets, pails, baths, pulp bowls, kneelers, knife boards, dust sheets, and all other cleaning apparatus required by the housemaids, while nails and brackets must be fixed upon the walls to hold the brooms, dustpans, whisks, etc.

Every month this cupboard should be properly turned out, the walls swept and the shelves scrubbed. An inventory of the contents should be pinned on the inside of the door, and anything taken out of it sllould be carefully returned to its

place after use.

Where, unfortunately, there is no spare cupboard room, the brooms, etc., must be kept neatly somewhere in the kitchen or scullery, but on no account allow them to stand about in various parts of the house.

BACK PREMISES. Nothing has a more slovenly appearance than untidy, dirty back premises, which part of the household may be justly said to form an index to the character of the servants, or those who have the care of them.

All outside premises should be kept clean, ventilated and well aired. Good locks to secure the doors against unlawful intruders, and to keep them shut, are of course of primary importance. Rooms over stables, if not inhabited, should be opened up and frequently aired.

All outhouses need to be lime-washed at least once a year, and particular care must be taken in keeping them free from dirt, dust and rubbish, or they will soon become the abode of rats, mice and other vermin, which, if once established, give a lot of trouble to thoroughly eradicate, rats especially being a menace to the health of the family, frequently finding their way into a drain and allowing the escape of sewer gas, which may not be immediately discovered, and may be the cause of diphtheria or fever.

CHAPTER XVII

HINTS ON SPRING CLEANING; CARE OF BOOKS

PRING CLEANING. What a feeling of dread and irritability does the sound of this word create too frequently among the various members of the household, from the master and mistress down to the youngest of the servants. Instead of dwelling upon the beauties of nature unfolding to the view, how often is the young housewife apt to allow her mind to associate with spring, thoughts of paint, papering, whitewashing, and general upheaval! Often, too, spring cleaning passes into summer cleaning before the house is restored to its usual state of peace and good order.

Spring cleaning, then, should be carried through quickly and methodically, so as to inconvenience the inmates of the house as little as possible. The best time of the year to choose for the task is either late spring or early summer, when the weather is brighter, the days longer and fires will most likely have been discontinued,

as the days become warm and fine.

Preparations beforehand will save much time and worry, and these of course will be determined by the work which is to be done. If re-decorating is necessary, decide upon the papers and paint, and take care to engage the workmen in plenty of time, or there may be difficulty in procuring suitable people for the task. If extra help will be required, engage your usual charwoman, or a reliable, well-known woman, so that the employment of indifferent workers, and perhaps dishonest persons, may be avoided. Arrange the work so that all rooms need not be dismantled at the same time, causing discomfort to the family.

Buy in advance, and have ready for use, any new floor coverings, curtains, etc., which may be necessary.

Arrange with the sweep to attend to all the chimneys, and give instructions for the carpets to be taken up, cleaned and re-laid. Have plenty of rubbers and dusters clean and ready for use, and see that there is a good stock of all cleaning materials in the house. Do not forget that the household will need meals during the time of house-cleaning, and make arrangements for these to be served punctually and comfortably.

Beginning with the top of the house, work downwards, finishing with the kitchen and offices, never attempting to complete too much in one day.

There are many special items of work which may be reasonably done before the actual spring-cleaning begins. Among these may be

mentioned the turning out of all drawers, which should be scrubbed inside, dried and repapered before the contents are replaced in them, the space behind the drawers being dusted and sprinkled with "Keating's Powder"; the sorting of clothes and disposing of all which are to be discarded; the care of winter clothes, which should be well shaken, brushed, folded and put away with a good moth preventive, all stains having been removed; the disposal rubbish; the taking down of winter hangings, which should have the stains removed, be brushed thoroughly, hung in the open air for several hours, then folded with soft paper, between the folds to prevent creases, and put away with a goodly supply of moth preventive; if dirty these hangings should be sent to the cleaners before being stored for the next season. Extra blankets, too, which have been in use during the winter months, should be washed, aired and carefully put away for future use; binders on the mattresses or the mattress covers will need to be removed, washed and prepared for their replacing; the china and linen cupboards should be overhauled, the contents turned out, fresh inventories made and deficiencies replaced; and the ornaments of each room washed or cleaned.

It is advisable also to take the bedsteads to pieces, clean all the parts, and insert paraffin with a feather into the joints. The blinds may be taken down and cleaned in various ways according to the material of which they are made.

FOR VENETIAN BLINDS, unscrew them from the window frame and remove the cords, tapes and dust the laths. Wash the laths if unvarnished in warm soapy water, rinse them in clear warm water and dry thoroughly. If varnished wash in cold water to which two tablespoonfuls of borax (dissolved in a little boiling water) has been added; rinse in cold water and dry. Scrub the tapes on a table, rinse, stretch and iron them; rub each lath with, a little linseed oil or furniture polish and finish it with a dry soft duster; replace the laths in the tapes, put back the cords, and screw the blinds into their place again. Very faded laths may need a fresh coat of paint, or may require to be revarnished.

FOR HOLLAND BLINDS, remove them carefully from the rollers, wash in warm soapy water, rinse first in warm clear water, then in cold, and stiffen with bran water (See Chapter XXV).

Stretch and pin the blinds to a cloth upon the floor, and when sufficiently dry, iron, and polish with a polishing iron. Slightly soiled blinds may generally be cleaned by rubbing them with stale bread after they have been thoroughly dusted.

CASEMENT CLOTH OR TAFFETA BLINDS will require shaking to remove the dust. After this, they may be washed in warm, soapy water, rinsed first in warm and then in cold water, squeezed, shaken and dried quickly, and finally pressed with a warm iron.

MOTH PREVENTIVES. Many means are resorted to for the preservation of clothing and household goods against the attacks of the common moth. All, however, are not equally efficacious, but the following may be regarded as generally successful. Pine tar (tarine) bags may be bought in various sizes for use when storing woollen goods; also small sheets of pine tar paper for placing in boxes and drawers, and larger sheets for lining wardrobes, trunks, etc., are obtainable. These are entirely insect proof.

Bags made of unbleached calico, wrung out of turpentine and dried out of doors, are also very good for protecting woollen goods. Carbon, camphor, bitter apple, Russia leather parings, oil of lavender, cedar wood, shavings and ground pepper are also useful for placing between the folds of woollen garments, which should then be tied up in brown or news paper, leaving no space into which a moth could possibly penetrate. Any article badly eaten by moth should be destroyed or there will be the risk of infecting other goods. Moth eggs in woollen cloth may be destroyed by saturating the affected part with a solution of acetate of potash in spirits of rosemary, in proportion 15 grains to the pint.

THE BEDROOMS. To spring clean the bedrooms, it is advisable to take away everything possible from the room. Remove the ornaments and ware, pictures and small furniture to another part of the house, take down the curtains and take the bedding out of doors if possible to be

thoroughly beaten and brushed; dust and cover up the larger furriture, and send away the carpet to be cleaned; have the chimney swept, and the room will then be ready for the actual cleaning to begin.

Sweep the walls and floor; clean the fender, fire-irons, and grate, and the windows and walls, and wash all the paint work; scrub the floor and leave the windows and doors open to dry the room. While this is in progress, wash the ware and ornaments if not already done, clean the pictures and polish the small furniture. Attend to the carpet if it is to be cleaned at home, so that it may be ready to lay down again the same day.

As soon as the room is dry, proceed to put up the pictures, and replace all ornaments, blinds and curtains. Dust the bedstead and make up the bed; polish the large furniture and relay the carpet. Return the china ware to the room, fill the water bottles and jugs, and provide clean towels and a box of matches.

PESTS IN BEDROOMS. Fleas unfortunately will frequently find their way into the house, particularly where dogs or animals are kept, but may be got rid of by the method here suggested. Scrub the floor of the room with carbolic soap, washing all parts of the bedsteads with the same detergent. Take the mattress out of the house, beat and shake it thoroughly, sprinkling it and the other bedding and stuffed furniture in the room with Pyrethrum powder, which may

be purchased at the chemist's for a small sum. Boil laurel leaves in water for several hours, and while the mixture is still hot, sprinkle it on the floor under the beds. Make little muslin bags filled with camphor and sew them to the blankets.

Bugs may be brought into the house by some accident, and if neglected will multiply very quickly; it is therefore expedient to get rid of

them as rapidly as possible.

Take the bedding outside the house, and brush it well, taking especial care to look into all the crevices of the binding and under the tufts. Wash the bedsteads with hot water and paraffin soap, dry it thoroughly, and paint the bedstead all over with paraffin or turpentine.

Should bugs be present in an old house, as they sometimes are, particularly when it has been empty for some time, the wallpaper may have to be stripped off and the rooms fumigated before

they are got rid of.

THE SITTING-ROOMS. These also require to be prepared for the cleaning, and the mistress, or some responsible person, should attend to the dusting of the books and washing of china and ornaments, to ensure proper care being taken of the valuable articles. All pictures must be removed, dusted and cleaned, care being taken not to pierce the brown paper at the back of the frames; any paper which is damaged in this way must be renewed, and the cords or wires tested, new ones being put where necessary. Time must

be allotted for this work to be properly carried out, and the mistress should personally superintend it, or appoint a trusty representative. The rest of the cleaning may then go forward, the same rules being followed, as in the case of the bedrooms.

PREPARATION FOR THE WORKMEN. Where papering, painting and whitewashing are to be done, it will be necessary to remove the stair carpets from the stairs and passages leading to the rooms under repair. From each room remove all light furniture, pictures, ornaments, curtains and blinds; take up the carpet, folding it with the seams lengthwise, then place the heavy furniture in the centre of the rooms, cover it with dust sheets. Have the chimney swept, and let all be in readiness for the men to begin their work at the hour appointed.

CARE OF BOOKS. Books will soon deteriorate if not removed periodically from their shelves, which should be dusted and cleaned according to the nature of the wood of which they are made. Glass-fronted shelves will also need to have the glass cleaned. The boards of leather-bound books should once every year be treated with a preservative, such as a little vaseline very sparingly used, and well rubbed in evenly all over. The books in closed cases will require to be removed only once in the year, but those on open shelves should be properly dusted at least every three months.

TO DUST BOOKS. Remove them from the shelves, but do not open them. Hold them tightly upside down and flick with a feather duster; if the book is held loosely and dusted with the right side uppermost, the dust instead of being dislodged will fall between the leaves. After removing the dust from the books, place them on the table with the leaves as free as possible, to allow air to pass among them.

BOOKSHELVES. Do not have these fixed flat against the wall, and do not keep books upon the floor; a space for air to circulate on all sides of the bookshelves should be provided, and when plain wooden shelves have been scrubbed, they must be thoroughly dry before the books are replaced upon them, damp being the principal cause of mildew which, if allowed to develop among books, will ruin both the paper and the bindings.

CARE OF BOOKS. Excessive heat will cause leather to become dry and lose its flexibility. The bookcase, therefore, should not be placed too near hot water pipes, neither should the books be exposed to the direct rays of strong sunlight, which, besides causing the colours to fade, may promote dry rot in the leather. Gas fumes, also, have a bad effect upon leather, and in many libraries the use of gas for heating and lighting has been discontinued for this reason. If, however, books must be kept in a room so lighted, the shelves should not be placed too high;

the fumes, which rise when heated, will then be less likely to come in contact with the contents.

Never pack books too tightly into the shelves, as in removing them the backs may become torn, neither put them in so loosely that the leaves fly open admitting dust, damp and mildew. In the case of very heavy books, the leaves will sometimes drop to the level of the shelf, if put in too loosely, and this will ruin the shape of the binding.

When using books, recollect that heat from the fire will warp the covers, therefore take care not to bring them so near that they may be affected in this way.

Cutting the leaves of a book with a paper knife needs great care, or jagged edges will be the result. It is a great mistake to turn down the corners of the leaves, as this habit will permanently disfigure the book, and lessen its value. Books, when properly sewn and bound, should admit of being opened quite flat, but cheaper bindings will often become strained if the book is opened to its fullest extent and the cover pressed down; it is therefore necessary to exercise care in this respect when using books which are stiffly bound, or much damage to the backs may ensue.

Never leave books lying about all over the house, but carefully replace them when finished with.

CHAPTER XVIII

THE CLEANING OF SILVER, COPPER A'ND OTHER METALS, PEWTER, CUTLERY

SILVER, the whitest of all precious metals, Stakes a very high polish. It is one of the best known of metals, softer than copper, though harder than gold. Much of the world's supply of silver is produced by mines in various parts of North and South America, where it is found in a free state, as well as in certain combinations, and embedded in a variety of ores.

To harden it, and render it durable for articles of household use, an alloy is usually amalgamated with the pure silver, copper being most commonly used. German silver (a mixture of copper, zinc and nickel) and brass (composed of copper and zinc) are also employed for the purpose.

Genuine silver articles of British make are "hall-marked," that is, stamped with the lion, which has marked the standard of silver since

1545, except between the years 1696 and 1720, when British goods of this class became known as Britannia Plate, and bore a very high value. Until 1822 the lion was betrayed regardant, or facing the observer; after that date the face has been in profile. The price of silver depends upon the current market value of the metal.

ELECTRO-PLATED articles are those manufactured from various metals with a coating of silver. Brass was used largely in the early days, for the ground work of electro plate, but now a whitish metal such as nickel or Britannia metal is considered better for the purpose. The quality of the plate will, of course, depend upon the value of the groundwork metal, and the amount of silver deposited upon it. The best AI quality on nickel should last with care for at least thirty years.

SHEFFIELD PLATE was first made about the year 1742, from copper and silver, a layer of copper being welded between coats of silver on either side. Copper being so much more valuable at the present day, genuine Sheffield plate is not largely manufactured for general purposes. It is much sought after by collectors, and should be cleaned in the same way as ordinary silver goods.

For both silver and electro-plate there are many well-known designs such as:

Rat Tail Albany Old English. King's

Fiddle Pattern Beaded Thread and Shell Buckingham

In choosing articles for table use, it is well to select designs which are readily cleaned, and the first four in this list are less elaborate than the other patterns.

With regard to the prices of table silver, no hard and fast rule can be laid down as to what should be paid for the various articles; these, of course, are determined by the kind and quality of metal, and the amount of workmanship expended upon the design. All silver and plated goods must be kept very clean, and the use of non-mercurial powder is important, mercurial powders tending to remove the plating, and to render silver brittle. Care must be taken also not to scratch and bruise the articles, which should be kept in a plate basket lined with baize and covered with leather, when not in use.

STORING. Pieces of plate not provided with special cases should have wrappers of chamois leather made to fit them. Baize is sometimes used, but it is not so efficacious as leather, since, being porous, it will admit air and allow the silver to become tarnished. Before putting silver articles away for any length of time, clean them thoroughly, wrap them in tissue paper, and put into their leather cases, storing them in a plate chest or box.

DAILY CARE OF TABLE SILVER. Wash it in hot soapy water, taking only few articles at one

time to avoid scratching; rinse all in hot water, wipe dry with brisk rubbing, afterwards polishing with a leather, and put away carefully in a plate basket.

TO PREVENT "FUSTY" TASTE IN SILVER TEAPOT. After washing and drying carefully put away with a lump of sugar in it; this will absorb all moisture and prevent the "fusty" taste.

WEEKLY CLEANING. Once a week all the table silver should be thoroughly cleaned with a good plate powder. First wash, rinse and dry all the pieces, afterwards rubbing them with precipitated whiting or a good plate powder, moistened with water, and applied with a soft plate brush to the chased parts. Allow the pieces to dry well before rubbing the powder off with a soft cloth, and brushing it out of the crevices with a plate brush; the final polish may be done with a leather.

If silver is much tarnished, moisten the powder with ammonia or methylated spirit to remove the stains, although articles cleaned with methylated spirits or ammonia will readily tarnish again.

TO PREPARE PRECIPITATED WHIT-ING. Put ½ lb. of whiting into a piece of muslin; place it in a jug of cold water and allow it to remain until dissolved; let it settle in the jug for half an hour before pouring off the water, after

which the whiting may be spread out to dry, and stored in a tin for use. Prepared in this way, whiting is rendered so fine that there is no fear of the plate becoming scratched by it.

INKSTAINS ON SILVER may be removed by rubbing the stain with a mixture of whiting and sweet oil made into a thin paste, and leaving it for twenty-four hours, after which the article may be washed, wiped and dried. The final polishing is done in the usual way.

SILVER SALT CELLARS, if not fitted with glass linings, should have the salt removed every evening, or verdigris may become apparent.

EGG AND MUSTARD SPOONS will be darkly stained with the sulphur present in the foods for which they are used. These stains may be removed with a little salt, after which the spoons may be cleaned as usual.

PLATE MIXTURE.

Take I oz. of yellow soap

1½ pints of boiling water
½ lb. of whiting
2d. of rouge
and I tablespoonful of ammonia.

Shred the soap finely and dissolve it with the boiling water, adding the ammonia, also whiting and rouge, which must be first mixed with a little cold liquid to prevent lumps. Mix all well, store

in a bottle, shake gently before use, and apply the mixture with a soft rag.

OXYDIZED SILVER should not be brightened with powder, the metal being intended to present a dull appearance. To clean it, wash in warm soapy water, rinse and dry, giving a final rubbing with a leather. Should it become too bright, the dull look may be restored by using a solution of $\frac{3}{4}$ oz. of sulphate of soda with $\frac{1}{2}$ pint of water, afterwards rinsing in very hot water, drying and rubbing with the leather.

FILIGREE SILVER. Washit in hot soapy water, rinsing in clear hot water, and drying. With a soft nail brush dipped in moistened whiting well scrub all the parts, subsequently washing again in hot water, making use of the nail brush to remove the whiting; rinse in clean hot water, and dry thoroughly, finally polishing with a leather.

A "Selvyt" cloth forms an excellent substitute for chamois leather and is far less expensive.

BRASS, an alloy of copper and zinc of a bright yellow colour, is hard, malleable and ductile. The best quality is composed of two parts, by weight, of copper to one part of zinc.

Lacquered or fancy brass is coated with a spirit varnish which prevents the metal from tarnishing. Care must be exercised in cleaning it so as not as to remove the varnish. It may be kept bright for a long time by merely rubbing it well

with a leather, but when this treatment ceases to be effective, wash the brass in warm soapy water; rub with a cut lemon; rinse in warm water, wipe dry and polish with the leather.

When lacquer has worn off, the brass may be re-lacquered, or may be treated as ordinary non-

lacquered brass.

Inferior brass goods sometimes look black after cleaning when the lacquer is wearing off; this generally indicates that lead has been used in its composition. Such articles should be sent away to be re-dipped in brass, as re-lacquering is not sufficient.

NON-LACQUERED BRASS may be cleaned with any good metal polish either purchased ready mixed, or prepared at home.

The following recipes are all excellent and

will do good work:

METAL POLISH 1. Mix together in a bottle

I gill of oleic acid

5 oz. of powdered talc

I gill of paraffin

I teaspoonful of oil of lemon.

Shake well when using and apply with a soft rag.

METAL POLISH 2. Take I oz. of talc and 2 oz. of powdered bathbrick, place them in a jar and mix to a thin cream with paraffin. Store it in a bottle, which must be shaken before use; apply with a piece of flannel. If the mixture becomes too thick use paraffin to thin it. 5

METAL PASTE

Take I oz. of rotten stone

I oz. of whiting

2 oz. of soft soap

3 tablespoonfuls of turpentine.

Put these ingredients into a jar and stand it in a saucepan of hot water; mix until all is incorporated; put in tins, which should be kept well covered, and apply with a soft piece of flannel.

Powdered bathbrick or rotten stone moistened with turpentine or paraffin may be very success-

fully used for cleaning brass.

METHOD OF CLEANING. Rub the brass well with a rag and the metal polish, afterwards brightening with a duster.

All non-lacquered brass looks better if finished with a leather and a very little dry whiting.

BRASS CURTAIN RINGS, PINS and PICTURE HOOKS should be placed in a basin containing Id. worth of rock ammonia dissolved in ½ pint of boiling water. Leave the articles in this mixture for twenty minutes, after which they may be removed, wiped and polished with a leather.

STAINS ON BRASS may be removed by rubbing the stained part with powdered bathbrick mixed with ammonia or methylated spirit, afterwards polishing in the usual way.

NEGLECTED BRASS, or brass which has not been cleaned for a long period, may be made

bright by using the following mixture: Dissolve I oz. oxalic acid crystals in I, gill of water; rub this well into the brass, using for the purpose a pad of rags tied to a stick; wipe dry and polish with a leather.

Great care must be exercised in mixing and using this poison; it should not be touched with the hands, and the rag mop must be burned after use.

The following method is also very successful for restoring neglected brass: make a paste of oxalic acid and precipitated whiting; rub the brass, with the mixture, allowing it to remain for five or ten minutes, when it may, be rubbed off and the article polished with a duster.

COPPER is one of the earliest known and one of the most familiar of metals; it was used in ancient times as an alloy with tin for producing bronze. Copper ores are now most abundant in North and South America, though large quantities are still found in Siberia, Spain, Australia and Prussia. In England, Cornwall is the chief copper mining district, and Swansea in Wales has gained great celebrity for copper-smelting. The metal is of a pale colour tinged with yellow, and malleable, durable and an excellent conductor of heat and electricity. All compounds of copper are poisonous.

The surface of the metal when exposed to damp will become dim, which condition is caused by the formation of a thin coating of oxide of copper. This, if not removed by cleaning, will

absorb carbon-dioxide from the air and become a basic carbonate of copper, commonly termed "verdigris." Blue and green verdigris, the latter of which contains a greater proportion of copper, are used both as pigments and mordants.

CLEANING COPPER. Fancy copper is cleaned in the same way as lacquered brass, but for plain copper utensils, follow the directions given for copper saucepans in Chapter XIII.

BRONZE is an alloy of copper and tin, to which other metallic substances, notably zinc, are sometimes added. It is a fine grained metal capable of taking a smooth and polished surface, and is harder and more fusible than copper, although not so malleable.

TO CLEAN BRONZE wash it in warm soapy water, using a soft brush for all the ornamented parts; rinse and dry thoroughly; rub it with a rag dipped in salad oil, and polish well with a soft duster.

FANCY WROUGHT IRON. Clean all articles made of this metal by dusting all the parts carefully, rubbing with a rag dipped sparingly into paraffin, and polishing with a duster.

BRITANNIA METAL is an alloy of tin with copper, zinc, antimony and bismuth, and occasionally with lead. Of a silvery-white colour, capable of taking a very high polish, it is useful for many household utensils.

TO CLEAN BRITANNIA METAL. Wash the articles in warm soapy water, rinse in hot water, and dry. Clean with whiting moistened with water, and polish first with a duster and then with a leather.

PEWTER. The old "standard" pewter was stamped, and was an alloy formed of four parts of tin to one part of lead; other pewters, however, contain copper, antimony or bismuth. This metal is most admired when not too highly polished.

TO CLEAN PEWTER. Wash it in warm soapy water, rinsing and drying it thoroughly, after which rub it with a leather. If in a very bad condition, pewter may be cleaned with a mixture of:

- I tablespoonful of soft soap
- I tablespoonful of rotten stone
- 4 tablespoonfuls of turpentine.

Mix the rotten stone and soap with boiling water until it is like putty, then thin it with the turpentine until of the consistency of cream. Apply the mixture with a soft flannel, polish with a duster, finishing off with a leather. If the metal is very greasy, before cleaning rub it over with a rag dipped in turpentine.

STEEL is a variety of iron which has been used for many purposes from time immemorial; indeed, it is not known how and where it was first manufactured. In the making of tools, weapons, rails and many necessaries in the house,

steel is indispensable, and Great Britain, the United States and Germany are the leading steel-producing countries. A certain proportion of carbon is regarded as an essential element, although other ingredients are also present. It is manufactured from pig-iron, which is placed in vessels fitted with charcoal, and subjected to enormous heat for several days. About three weeks are occupied in converting iron into steel—one to raise the furnaces to the necessary heat, one to keep the metal at the temperature reached, and one to gradually cool it down. Steel is capable of being hardened, tempered and highly polished; it should be kept free from rust, which will eat into and destroy the smooth surface.

TO CLEAN STEEL. Use emery paper, powdered bathbrick with turpentine or paraffin, fine ashes and paraffin, emery powder, crocus powder, rotten stone, or steel burnishers specially made for the purpose. Rub well with any of these agents in one direction only, to avoid scratching, and polish with a leather and little dry whiting.

RUSTY STEEL may be brightened by rubbing it with a cut onion, leaving it for twenty-four hours, and then cleaning it in the ordinary way.

STORING STEEL. First clean all articles thoroughly; then grease them all over with mutton suet; or any saltless fat; wrap in aired brown paper, and store in a dry place. Cut steel, when not in use, should be kept in powdered starch.

CUTLERY. The principal items of cutlery in the house are the table knives and scissors. Knives are composed of two parts, the handles and the blades, the former being usually made of ivory horn, bone, xylonite, silver, electro-plate, or mother-of-pearl, and the latter of steel, silver or silver-plate.

Knives should be chosen with thin smooth blades, riveted and not cemented into the handles. and so nicely balanced that the blade never rests upon the table. The prices vary according to the quality of the steel and other materials used, ivory handled knives being the most expensive. The good quality of steel should claim the attention of the buyer, rather than the outward appearance of the knife. Knives should be employed only for the purposes for which they are intended; for instance, dinner knives should not be used for cooking, but special kitchen or "cook's" knives should be provided for such work, and all knives in the house should be kept sharpened.

CARE AND CLEANING OF KNIVES. Wash the table knives as soon as possible after use, wiping them first with paper if very greasy. Wash the blades in soapy water without putting the handles into the water, and wipe the handles with a clean damp cloth; wipe them very dry, and polish on a knife board, using a good knife polish or powdered bathbrick, keeping the knives flat on the board while polishing, and giving particular attention to the shoulder and back of each knife.

When cleaned, dust the knives and place them in a knife tray, with the blades all pointing one way. In removing knives from the table, the blades should be kept together to avoid staining the handles.

Silver and silver-plated knives may be cleaned in the same way as other articles of the same metals.

KNIVES WASHED IN A JUG. Wipe the knives carefully with paper, place them in a jug containing sufficient hot soapy water to reach to the shoulders; leave them for five minutes, then wipe and polish as usual.

Stains from ivory handles may be removed by rubbing with a rag dipped in lemon juice, and afterwards in whiting.

KNIVES USED FOR ONIONS. These should be kept apart from others, and cleaned by rubbing them well with powdered pumice stone or coarse salt, and rinsing in cold water Then they may be cleaned and polished in the usual way.

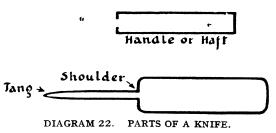
STEEL KNIVES USED FOR FISH will need to be washed in very hot water with a little soda rinsed in cold water, dried and polished as usual.

BADLY STAINED KNIVES. To remove the stains, cut a potato in halves, dip it in powdered bathbrick, rub the knife well with this, then polish in the ordinary way.

TO STORE KNIVES. Clean them thoroughly; grease all the steel parts with mutton suet or white vaseline; wrap in dry newspaper, tie in a piece of chamois leather, and store in a very dry place.

KNIFE MACHINES for cleaning purposes give excellent and rapid results, but should be used strictly according to the printed instructions given with the machine. Various sizes and qualities may be selected at all sorts of prices, but very cheap machines are not recommended and are seldom reliable, as they easily become out of order, and the parts wear out very soon.

TO FIX A LOOSENED BLADE, fill the handle of the knife two-thirds full of powdered resin and bathbrick; heat the tang and press it well into the handle, holding it till set. (See Diagram 22.)



CHAPTER XIX

OF GLASS, ETC., WINDOWS, MIRRORS, PICTURES

VESSELS for drinking purposes were used long before tables were laid for meals. Old specimens of the vessels themselves indicate that their shapes and the materials from which they have been made have varied infinitely in the world's history. Among savage tribes the skull of a fallen foe has served as a favourite drinking cup, being passed from guest to guest. The natives of many countries, too, manufacture such cups from gourds, melons, cocoanut shells, and ostrich eggs. Evolving from these have come the horn, ivory, wooden, metal and leather drinking vessels, and finally those of glass.

GLASS, a more or less transparent substance, is obtained from a fusion of various bases with silica. In early days it was made by the Phœnicians, and was known to ancient Egypt, whence

it was introduced into Rome. Venice in the Middle Ages was famed for its glass, but Bohemia acquired pre-eminence in the manufacture of this substance after the seventeenth century. In Great Britain windows were first glazed about the beginning of the seventh century, but the practice did not become common until the twelfth century. Window glass is made from soda, lime and silica.

Glass for trade use is either cut or moulded, the former being heavier and more expensive than the latter, owing to the time and labour required to produce it.

IN CHOOSING GLASS, purity of colour and freedom from bubbles and flaws claim the first attention, and indicate a good quality. In buying table glass, it is advisable to select a pattern which may be easily matched when breakages occur, and for ordinary use simple designs are more suitable, and more readily kept clean than elaborate glass ware. The prices will, of course, vary according to the colour and texture of the glass.

CARE OF GLASS. Handle it carefully and keep it scrupulously clean; store it in a dry cupboard and on a separate shelf, so that it may not be broken by coming into contact with less fragile articles; thoroughly dry before putting the vessels away, and turn them upside down upon the shelf.

Should it be necessary to pour boiling liquids

into tumblers, first place a spoon in each, which will prevent the glass from cracking. Glass should never be washed in excessively hot water.

TO TEMPER GLASSWARE. Place the glass in a large saucepan of cold water, and gradually bring it to a boil: allow it to simmer for half an hour, taking care that the glass is covered with water all the time; remove the saucepan from the fire and allow it to gradually cool, taking the glass out and wiping it when quite cold. Glass tempered in this way will not crack when hot liquids are poured into it.

CLEANING GLASS. Wash the articles in warm soapy water, using a brush for cut or engraved parts; rinse with cold water, drain and dry with a linen cloth, rubbing it well to get a good polish. Avoid holding wine glasses by the stem while drying them, as they are easily broken.

Glasses which have been used for milk should be rinsed in cold water before they are washed.

A few drops of vinegar added to the rinsing water will aid in brightening the glassware. Pulp or wooden bowls are excellent for washing glass and china, as they are not so hard as zinc or earthenware, and there is less danger of chipping and cracking the articles.

STAINS. Hard water stains may be removed from glass by mixing together:

I tablespoonful of vinegar.

I tablespoonful of salt.

I teacupful of washed tea-leaves.

Place these in the stained glass and half fill with warm water; rinse round and round, leaving it for two or three hours, and shaking it occasionally during that time; then remove the mixture and wash the glass in the ordinary way.

WINE STAINS. The same method may be adopted for these, or any of the following:

Bran and warm water; vinegar and salt; crushed egg shells with salt and sufficient water to cover; fine sand and water; soaped pieces of brown paper and water; soaped pieces of tissue paper and cold water (a trade remedy); and shot or ashes in cold water, which should be tried as a last resource, as both are liable to scratch the glass.

After treatment for the removal of the stains, wash the glass, and in the case of decanters, dry the outside, and turn them up in a rack or jug, leaving them to dry in a warm place, since the neck is seldom large enough to admit of a cloth being admitted to the inside.

CRUET BOTTLES. Clean with any of the foregoing agents, and take care to dry thoroughly before re-filling.

DISCOLOURED FLOWER VASES. If none of the ordinary methods will satisfactorily dislodge the stains from vases, pour into them a little spirit of salt, shake well, pour the liquid away in the lavatory, and wash the vases. Take care to use this poison with caution, and do not leave any of it about the house within the reach of children or careless persons.

ANTIQUE GLASS. As soap and water, and the ordinary methods of drying, tend to render antique glass of dull appearance, it is better to adopt the following method for cleaning it. Soak it in ammonia and water for a short time, using a brush for the crevices when the glass is cut; when clean lift it out and bury it in a box full of dry sawdust, leaving it for $1\frac{1}{2}$ to 2 hours, after which it may be removed and dusted, and will then present a beautiful appearance with a fine lustre.

STORING GLASS. Wrap each piece in tissue paper and store in a dry cupboard. If the cupboard be damp the polish upon the glass will be injured.

TO REMOVE. FAST STOPPERS, place the bottle in a basin with enough hot water to reach the top of the neck; the air in the bottle as well as the glass will then expand and loosen the stopper; or another method may be tried, that of applying a little salad oil round the mouth of the bottle, leaving it in a warm place for some time and gently tapping with a ruler occasionally.

WINDOW CLEANING. Before cleaning the windows, lay something over the carpet to protect it against splashing; dust and pull up the blinds, shake and pin up long curtains, or remove

short ones. Dust the framework of the windows and clean the outside first. Wash the glass with warm clear water, using a sponge and paying special attention to the corners; rinse with cold water, using a leather, and polish with a dry linen cloth.

When the windows are finished, the curtains may be replaced, and the blinds adjusted.

In most large towns there are window-cleaning firms who will undertake the cleaning of the outsides of windows situated at a height from the ground; unless this be arranged for, or unless the windows are made to turn completely over to be cleaned from inside the room, some safety apparatus should be provided, or serious accident may be the result of climbing out of the window. Newspaper for polishing the glass is found an excellent substitute for the leather.

Windows washed when the sun is on them will not be satisfactory, and such work done in a shower of rain is lost labour; avoid also a frosty day if possible, as there is danger of the glass cracking.

IN FROSTY WEATHER the windows may be cleaned with a rag dipped in methylated spirit, and polished with a duster.

IN SUMMER paraffin sparingly used, and the panes well polished afterwards, will keep flies from settling.

IN WINTER glycerine used very sparingly upon

a rag, and applied to the glass, which should afterwards be polished, will keep the windows from becoming steamed.

STAINS of paint or putty upon windows may be removed with turpentine or hot vinegar applied with a rag.

TO GIVE A FROSTED APPEARANCE TO GLASS. Dissolve 3 tablespoonfuls of Epsom-salt in one quart of hot beer, and apply the mixture to the glass with a paint brush, either evenly or in dabs; the latter method gives a pretty effect. A weak solution of gum arabic may be used instead of beer. Glass thus treated may, if necessary, be washed with soap and water.

REMOVING BROKEN PANES OF GLASS. This is quite a simple matter if the putty surrounding the pane be covered with soft soap and left for a few hours.

MIRRORS. Nothing looks more untidy and slovenly than dirty mirrors, they should therefore be kept bright both on this account, and that they may reflect objects in a satisfactory manner.

For the frames, follow the rules laid down for picture frames. For the glass, rub it with a rag dipped into methylated spirit, and polish with a soft duster or leather, and a little dry whiting. Fly marks may be removed by rubbing with a little powdered blue tied up in a piece of flannel and moistened.

PICTURES. Prints of good pictures being now procurable at prices within the reach of all, no home need be without adornment of this kind upon its walls. Do not, however, hang pictures upon a damp wall, as this will soon cause mildew to make its appearance. See, also, that they are placed in such a position that they may be readily dusted every day without trouble. Cords and wires need to be tested from time to time, as a fall, while injuring the picture itself, may also be the cause of accident to one of the inmates of the house, and to that extent, at any rate, may be regarded as "unlucky." Cords should not be fastened to the loops at the back of the picture, but passed right through them, so that it may be turned round periodically, to avoid the constant strain and friction in one part only.

Pictures are better hung from rails of moulding by means of hooks, rather than from nails in the walls, which not only make unsightly

holes, but damage the property.

Small pictures should be hung low in the room, and if fixed to the walls with push-pins, which have neat heads of white glass, and are scarcely noticeable, may be removed easily from place to place without disfiguring the room.

TO KEEP PICTURES FROM DAMP WALLS. Press the point of a strong pin into the lower corners of the frame. Remove heads of the pins and press the pin into the wall. By this method the picture is prevented from touching the wall.

TO CLEAN PICTURES. Dust them lightly every day, and from time to time take them down and clean thoroughly. Clean the glass with a rag dipped in methylated spirit and polish with soft duster; dust the back and cord, and treat the frame according to the material used in its construction.

FOR WHITE ENAMEL FRAMES, wash them with warm soapy water, rinsing and drying, afterwards polishing with a dry duster.

FOR POLISHED WOOD FRAMES use a furniture polish.

FOR GILT FRAMES, wipe with a damp leather, drying with a soft duster, and using a soft brush for the crevices. If gilt frames have been neglected they may be washed with onion water, which will remove the dirt without injuring the gilding, and will also to a certain extent protect the frame from flies.

ONION WATER is prepared by boiling two large onions in one pint of water for twenty minutes; strain the water off and add to it I oz. of powdered sulphur.

Shake the mixture before using, apply with a soft rag and polish with a dry duster. This method will clean but will not restore the gilding.

Gilt frames are of either "German" gilt or gold leaf, the former being cheap and made by coating the frame with a composition, which is then covered with a layer of gold lacquer. These frames soon become black and the lacquer wears

off. Gilded frames are treated with either oil or water gilt, the gold, leaf being fixed with a usize, "and the bright parts burnished with agate.

TO CLEAN GILT FRAMES. Remove the cord from the picture, and brush the frame to get rid of every particle of dust, using a very soft duster; take a soft badger hair brush, moisten it in warm water, and apply it to the frame to remove any discoloured size, or thin coating of copal varnish which is generally used to protect gold leaf against scratches; use water very sparingly; on no account make it wet, when gold appears stop at once. Dry carefully with a soft sponge. Melt a little isinglass in a small quantity of hot water, allow to cool, and carefully revarnish the gold leaf with this; if too thick it will crack and peel off again; if too thin it will form but an inefficient covering. Rub all burnished parts with a soft leather, but do not touch these with the varnish. Frames cleaned in this way will not need similar attention for at least a year.

TO CLEAN MOUNTS. Remove the back of the picture; the mount may then be taken out, cleaned with stale bread, and replaced. Paste over the back of the frame a piece of brown paper, to keep the dust out; when applying the brown paper, paste it all over, and allow the edges to adhere closely to the frame, and as it dries the paper will pull up taut in the centre of the frame; if only pasted round the edges, it is liable to hang loosely, and will be difficult to fit securely.

CHAPTER XX

CHOICE AND CARE OF CHINA; MENDING CHINA; CARE OF MARBLE; TRAYS, ETC.

CHINA is so named from that country which has from very remote times been famous for the manufacture of some of the rarest and most elegant specimens of this beautiful ware, and whence it was introduced into Europe.

POTTERY, the forerunner of porcelain in the Western countries, has been made from pre-historic days, as the many fossilized pieces in the museums testify. The ancient Egyptians attained great skill in the art, and much progress was made in its development during the Middle Ages throughout Europe, enamels and glazes being brought into use. In England some of the best potteries attained great prosperity in East Staffordshire, under the artistic guidance of Wedgwood, and other successful factories have been established from time to time at Chelsea, Derby, Worcester, Coleport and Colebrook Dale.

On the Continent of Europe, Italy, Greece, Germany, France and Holland have produced some of the best work, while from the Portuguese came the name "porcelain," from "porcellana, a little cup," the early traders in this ware having been of that nation.

The prices charged for household china will be determined by the make, texture and purity of colour, also by the number of pieces in the case of breakfast, tea or dinner services.

CHOICE. In buying new china it is advisable to select a "stock" pattern or registered design which may be replaced quickly and inexpensively. There should be no flaws in the ware, and the cups should firmly balance upon the saucers; it is also expedient to choose articles whose handles may be readily washed, and milk jugs with sufficiently wide tops to admit the hand for cleaning purposes; those of a straight pattern, too, are better, shoulders and narrow necks being very difficult to keep clean.

CARE OF CHINA. China of every description cannot be too carefully handled at all times; neglect of this care will result in chipping and breaking.

It should be kept in a dry cupboard fitted with suitable hooks upon which to hang the jugs and cups, saucers and plates being piled in small heaps, not too high and heavy. Before putting china away in cupboards see that it is perfectly dry.

CLEANING. Empty all the cups and bowls; scrape the pieces from the plates, and pack all the china neatly together ready for washing.

Start with the cleanest pieces first, saucers, cups, plates, washing them in hot soapy water, and paying special attention to the handles and bases of the cups; rinse first in hot water, then in cold; drain and wipe dry.

If washing a large quantity of china, change the water from time to time, and use a jug mop for the insides of jugs.

TEAPOTS. Remove the tea leaves; wash the pot inside and outside, not forgetting the lid, and pay attention to the spout by cleaning it with a very small brush. Rinse, wipe dry, and put the pot away with the lid tilted to allow of a free circulation of air, and so prevent the teapot becoming "fusty."

CHINA ORNAMENTS. Valuable ornaments should be kept in a cabinet or closed china cupboard, and will then need washing only occasionally.

When dusting them use a soft brush for raised flowers or crevices; wash in warm soapy water, rinse in warm water, then in cold; drain on a tray and wipe dry.

Do not wet the inside of vases if the neck is too small to allow of drying thoroughly; dusting with a small feather brush is preferable.

MENDING CHINA. There are many reliable cements which may be purchased for this pur-

pose, and white oil colour, sold in tubes, will also be found quite satisfactory.

HOME-MADE CEMENT. One ounce gum acacia dissolved in I gill boiling water. Add sufficient plaster of Paris to form a thin paste.

Prepare the broken china by washing the pieces perfectly clean, drying them thoroughly or they will not adhere when the cement is applied. Thick china will need to be heated to prevent the medium from setting too quickly, and the pieces should be matched before this is

applied.

Coat the edges of both parts very lightly with the cement, and hold in position for a few minutes. If necessary bind the mended article together with tape, and remove any cement which may have oozed out around the edges of the break with a rag dipped in hot water. Let each piece thoroughly set before attempting to insert another. This 'frequently takes, some hours to complete, and in many cases it is well to allow a day or two to elapse ere joining another piece to that already fixed in its place.

PULP BOWLS are manufactured from compressed paper and painted.

TO CLEAN PULP BOWLS. Wash them in warm soapy water, if greasy, rub them with a rag dipped in turpentine, or apply coarse salt in the same way, if stained. Rinse in warm water, and see that they are thoroughly dried or they may become soft, and by degrees, non-waterproof.

IVORY. To keep ivory clean, dust it with a small soft brush (a camel's-hair paint brush), to reach all the carved parts. Wash in warm water with ammonia, rinse in cold water and dry. If very dirty, it may be washed in soapy water, but this is liable to effect the colour, turning it yellow. Occasionally after washing ivory, rub it with a rag dipped in lemon juice and precipitated whiting, leaving the mixture on for two hours, then gently rubbing it off with a soft cloth or brush.

PIANO KEYS. These may be cleaned in the way recommended for ivory, one key at a time receiving attention, those on either side of it being held down while it is cleaned. Take care that no whiting or moisture finds its way into the keyboard, or on to the sides of the keys.

Wax dropped upon piano keys may be removed with a blunt instrument, and the place afterwards wiped with a cloth wrung out of hot water.

TORTOISESHELL, should not be washed as it destroys the polish upon the surface. The following mixture will serve to clean it:

Jeweller's rouge mixed with a little olive oil well rubbed into the shell one way only. Polish with a soft duster, then with a leather and a little dry rouge.

WHITE CORAL, when dusty, should be placed in very hot water and left for twelve hours. Then

mix a solution of chloride of lime (I tablespoonful of the liquid chloride of lime to I pint of water), and leave the coral soaking in this for twenty-four hours. Remove it, rinse in warm water, then in cold water, and place it in the sunlight to bleach and dry.

MARBLE is limestone in its most compact and hardest crystalline form, and is capable of taking a very high polish. There are many varieties, and on account of the durability of the stone and the beauty of its tints, it is in much request for purposes of art and ornament; white marble, however, is the purest and rarest. The variety of colouring in marble is due to the presence of certain chemical substances, statuary marble being a pure carbonate of calcium. White marble was used by Greek sculptors from about the year 568 B.C., and rich buildings and monuments in Rome and Palmyra were mainly composed of white marble. Italy, some parts of England, Scotland, Ireland, and America produce various kinds of marble, used for many purposes.

In the house it is utilized for mantelpieces, tabletops, or fittings, and sometimes for flooring, wall-panels and baths.

CARE OF MARBLE. Dust carefully; wipe up water or splashes as soon as possible, or the moisture will discolour the marble. Remove any stains at once; the surface of marble, although apparently hard, is soon acted upon by acids,

and drops of medicine will often destroy it and "eat" into the limestone.

CLEANING OF MARBLE. Dust it every day, using a soft duster for flat surfaces, and a soft brush for statuary. If it is damp, wipe it perfectly dry. Washstands and tabletops should be washed once a week with warm soapy water, and scrubbed with a nail brush, after which they must be rinsed and dried; and they may occasionally receive the treatment prescribed for statuary. (See below).

MANTELPIECES, STATUARY, AND ORNA-MENTS should be kept well dusted and cleaned when necessary with one of the following preparations, which should be kept in well corked bottles.

I Mix

1 lb. of soft soap,

 $\frac{1}{4}$ lb. precipitated whiting

with sufficient water to form a paste, and then boil it. This mixture can be used hot or cold, but must be left upon the marble for some hours before the washing, rinsing and drying takes place.

II. Pass through a hair sieve:

2 oz. powdered washing soda,

1 oz. pumice stone,

and I oz. of whiting;

then add sufficient hot water to form a cream. The same method of application is adopted as for No. 1 mixture.

Black marble may from time to time be rubbed with a little furniture polish, or Cherry Boot Polish and afterwards polished with a duster.

GREASE STAINS. Remove these from marble by putting on a paste of Fuller's earth and water. Leave it for some hours and then wash off, repeating the process if necessary.

RUST may be dislodged by rubbing the part with lemon juice sparingly and quickly.

IODINE STAINS upon marble may be taken out with ammonia applied with a rag.

MENDING MARBLE. Small marble articles, not in constant use, may be repaired in the way recommended for china earlier in this chapter, but for large articles a stronger adhesive is necessary.

Mix to a stiff paste plaster of Paris with warm water; apply it to the pieces and put them together.

Plaster of Paris is formed from gypsum, a soft whitish mineral substance which is heated to a high degree and so freed from water, and then ground into a fine powder.

ALABASTER should be dusted, washed in warm soapy water, rinsed in cold water, and dried. Great care must be exercised in the washing; on no account must the article be left in the water as it softens and falls asunder.

MENDING ALABASTER. Mix a little plaster of Paris with white of an egg, and apply to the broken parts.

TRAYS. Many materials are used for trays, and among them may be mentioned silver, brass, copper, wood, japanned tin, china and papier mâché.

FOR CLEANING METAL TRAYS follow out the directions given in Chapter XVIII, and for china trays, those given in this chapter.

JAPANNED TIN TRAYS. Avoid exposing them to great heat, which is apt to cause the japanning to crack and chip off. A bad fall will also often prove disastrous to the enamel; the trays should therefore be handled carefully.

TO CLEAN. Wash them in warm soapy water, rinse and dry, polishing with a dry duster or leather.

When the trays begin to show signs of shabbiness, rub them with a rag dipped in furniture polish, and polish with a duster; or, if there are no cracks in the tray, sprinkle with a little hot flour and rub with a clean dry duster, finishing with a leather. Do not forget to give the back of the tray attention.

JAPANESE TRAYS, in all sizes and varieties of colour, may be bought very cheaply.

TO CLEAN. Wash in warm soapy water, rinse

and dry thoroughly, polishing with a rag dipped in furniture polish, and finishing with a soft duster.

PAPIER MACHE trays are made of layers of compressed paper and are lacquered.

Care must be taken to avoid unnecessary washing, which tends to make the lacquered surface dull. Clean the trays with a little hot flour, polishing with a duster. Do not use furniture polish if the tray is gilded as it will destroy the gilt.

WOODEN TRAYS may be procured either painted, lacquered or polished.

TO CLEAN. Treat painted or lacquered trays in the same manner as that prescribed for papier maché. Polished wood trays can be kept clean with furniture polish.

HOT WATER MARKS. This disfigurement may be removed from trays by rubbing the place with a rag dipped in a little linseed oil.

CHAPTER XXI

CHOICE, CARE AND CLEANING OF BOOTS; LEATHER GOODS; BOOT CREAMS

EATHER consists of the dressed hides or skins of animals, after the tanning process is completed. The word is derived from the Anglo-Saxon "lither," "yielding or soft," and the article has played a most important part in tde service of mankind, through all the centuries, from the time when it was made in ancient Egypt, Greece and Rome. Leather is usually known by the name of the animal from which the particular class is obtained, or from the system and method of preparation employed; among the most popular kinds may be mentioned morocco, kid, Russia, chamois, Cordovan, grained, russet, tan, patent, calf, glacé, Hungarian and others. The raw skins, or pelts, are well washed to cleanse them, and soaked for several days in large pits containing "milk of lime." From time to time they are taken out, the lime mixture

stirred up and the pelts returned to the pits. This process loosens the hair, which is then scraped off with blunt instruments, after which the skins are washed to remove traces of the lime, and put into the tanning pits. The best leather for soles of boots is made from cow hide, and tanned with oak bark, which contains from 10 to 14 per cent of tannin. When the tanning process is finished, the hide is oiled, half dried, laid out flat and rolled with heavy brass rollers; it is then coloured with yellow ochre, sized and oiled, and rolled again.

Sumach leaves are largely used for tanning the finer leather for the "uppers" of shoes, which is stretched, oiled and beaten, but not rolled. After the tanning and softening processes, this

leather may be dyed.

KINDS OF LEATHER. Stout quality, prepared from ox, horse, porpoise, and alligator hides; and fine quality, prepared from the skins of the goat, deer, calf and sheep.

Leather for blacking is made from the hide of the cow or ox, and undergoes a special process

to render it fit for blacking.

GLACE is manufactured from kid and goat skins, is pliable and capable of taking a high polish.

PATENT LEATHER is enamelled after the tanning and drying is completed.

BOX CALF is a very durable leather made from

bullock hides, and is not so heavy as leather manufactured from cow or ox hides.

DEER SKIN, a soft leather, is used for riding-breeches.

PIG SKIN is used for saddles.

MOROCCO LEATHER is manufactured from goat skins, which absorb dye and take richer colours than any other. It is named from the country where it was first produced.

SHEEP SKINS are prepared for cheap boots, also for linings, for bags and for aprons.

CHOICE OF BOOTS. Select a good leather; cheap boots are not economical, as they become quickly out of shape and are not waterproof. It is a good plan, too, to purchase boots a little while before they are actually needed for wear; the leather will last longer if allowed to become seasoned.

Boots should fit well to the foot, for if too large they will chafe the skin, wear out the stockings, give no support to the ankles, and readily lose their shape; on the other hand tight shoes are uncomfortable, deform the feet by causing corns and bunions, impede the circulation of the blood, giving rise to cold feet and chilblains, and impede the action of the muscles producing an awkward gait.

HEELS should be placed directly under the heel of the foot in order to properly support the

body; excessively high heels throw the weight of the body on to the front part of the foot, destroying the balance and preventing graceful movement.

SOLES of ordinary walking shoes should be fairly thick, these being less tiring and keeping the wet out more successfully than thin ones.

LINING should be without creases and firmly secured; yellow linings, which have been found to "draw" the feet, making them tender, should be avoided if possible.

BUTTON AND EYELET HOLES should be neatly and securely finished.

Hand-made boots are more durable than those manufactured by machine, the stitching of the machine frequently cutting the leather, which will prevent re-soled boots from giving satisfaction. The soles of machine-made boots, too, are often put on with nails which will rust and wear out the leather.

CARE OF BOOTS. Have more than one pair in use at one time, so that each pair may be thoroughly dried after wearing, before being put on again.

All boots should be kept on "trees" to preserve the shape, and prolong their life, also to prevent wrinkles forming. Laced boots should be fastened after placing them on the trees, but button boots must be left undone.

Remove mud with a damp cloth or sponge before it dries on to the boots (if allowed to harden it impoverishes the leather, and also causes it to crack), and dry them thoroughly in a draught or a very gentle heat, but never close to the fire. Never place boots on the rack over the kitchen range, or the heat may crack the soles; a good plan is to place them upon a window sill out of the sunlight, or on their sides in the draught which enters under a door. If boots become very wet, they should be placed on their trees, or stuffed with dry hav or paper. Always watch for signs of wear, and have boots re-soled when these appear.

TO KEEP OUT DAMP. In very wet or snowy weather rub boots with dubbin, which may be purchased in tins for a small sum. The following home-made recipe also gives satisfactory results:

Take I oz. powdered resin 2 oz. mutton suet I gill of linseed oil.

Dissolve the resin in the linseed oil, melt the suet, mix the ingredients well together and store in a tin or jar.

Boots coated with dubbin will not shine; it will be necessary to wash off the dubbin before a polish can be obtained.

Boots which have been in the snow may crack if not carefully dried and the sole is liable to come away from the upper. To prevent this catastrophe, place the boots after drying for half

hour in boiled linseed oil, which is procurable ready for use, allowing the oil to just cover the soles. Rub the upper part sparingly with castor oil.

CLEANING LEATHER BOOTS. To black boots proceed as follows: Tie up and tuck away the laces to prevent their becoming soiled with the blacking, and wipe them with a cloth after the boots are cleaned. Remove all the mud with a fairly stiff brush, using a wooden skewer for the part between the sole and upper; on no account use a knife for this purpose, or the stitches may be cut and the boot fall apart. Apply the blacking evenly all over the boot, using a soft brush, and then polish with a softer brush still to obtain a nice gloss. Untie the laces and leave the boots ready for use. Do not forget to blacken the tongues and the part of the sole under the arch of the foot.

Once a week boots should be washed with warm soapy water with the aid of a sponge, but on no account should they be allowed to become too wet. Place them on the trees before giving this treatment, and dry them thoroughly with a cloth and then in a draught, subsequently rubbing a little oil into the leather now and then.

Blacking brushes are usually sold in sets, and should be numbered on the backs to prevent their being used for any other purpose than the prescribed one.

Blacking may be bought in either liquid or paste form; the paste in tins or skips will require

to be moistened before use, but the liquid is prepared ready for use and sold in jars. It should be kept tightly corked.

Avoid applying blacking too freely; it is extravagant, and more time and labour is afterwards required to obtain a polish; it also cakes upon the leather, causing it to crack. A reliable make of blacking only will give satisfactory results.

FOR GLACE OR BOX CALF SHOES, clean with a boot cream, applying it with a brush or a piece of rag, and polishing with a velvet pad or a duster. New brown boots cleaned in this way before they are worn will not become soiled so quickly as they otherwise would.

REAL KID BOOTS should not have a very high polish. Clean them with ink and sweet oil mixed in equal quantities, which mixture will blacken, clean, and sufficiently polish them.

STAINS ON BROWN BOOTS may be removed by washing the boots from time to time with warm soapy water, or rubbing with a rag dipped in methylated spirit and polishing with lemon juice and milk well rubbed in.

BROWN BOOTS HARD FROM SEASIDE WEAR may be softened by rubbing them with a rag dipped in olive oil, afterwards polishing them with a duster.

TO DARKEN TAN BOOTS clean them with ammonia and milk, polishing with a dry duster.

TO DYE BROWN BOOTS rub the boots well over with sand paper to take off the dirt, apply a flannel dipped in ammonia, brush over with American ink, allow to dry, and then polish in the usual way. It is, perhaps, more satisfactory to send the boots to a shoe-maker who will dye them for a small charge.

GREASE STAINS ON BROWN BOOTS may be taken out by rubbing with a rag dipped in diluted oxalic, in proportion I teaspoonful to a teacupful of water; or a little French chalk scraped on the spot and left for twenty-four hours may prove successful.

PATENT LEATHER should be dusted and cleaned with milk or beaten white of egg. A little vaseline sparingly rubbed into the leather occasionally is good for it. If patent leather shoes are warmed before putting them on, especially in wifiter time, they are less likely to crack.

To brighten dull patent leather use a few drops of turpentine, applying it with a soft cloth; this will renew the freshness, and make the shoes look like new. When shabby they may be treated with a preparation bought from a boot-maker's.

STORING BOOTS. Clean them and rub them all over with vaseline or some saltless fat. Wrap them in brown paper and store in a dry place.

CREAKY BOOTS. To remedy the evil, rub in

castor oil to repel the wet. If this treatment is not successful, soak the soles in cold water and salt for several hours, afterwards allowing them to stand in a tray with linseed oil for twenty-four hours.

TO POLISH DAMP BOOTS add a little paraffin to the blacking and clean in the ordinary way.

TO SOFTEN BOOTS, wash them with warm water; dry well with a cloth, rub in castor oil, and clean when quite dry in the ordinary way.

TO PREVENT SHOES FROM RUBBING THE HEELS, fix a piece of chamois leather round the inside of the back of the shoe.

GOLOSHES. To clean these, wash off the mud, wipe dry and put in a cool place, remembering that heat and oil will ruin the rubber.

TENNIS SHQES and beach shoes will often "draw" the feet, to prevent which sole socks of asbestos millboard not thicker than 15th of an inch should be cut out and put into the shoes.

LEGGINGS, both black and brown, are treated in the same way as black and brown boots.

RIDING BREECHES of leather should be placed upon trees, and then cleaned by rubbing with pipe-clay or "Blanco."

RIDING BOOTS. To clean these first sponge off the mud and place the boots in a draught to

dry. Rub the tops with powder sold by boot-makers for this purpose, following the directions printed on the tins. Wrap the tops in soft paper and put the boots upon trees. Apply a piece of cut lemon all over the boots, and carefully smooth them with a shank bone, which will help to bring out the grease, and improve leather of a dull greasy nature. A good deer bone can be obtained for 2s. 6d. at a bootmaker's. Apply a good blacking and polish in the usual way, using plenty of "elbow grease" to obtain the desired shine.

WHITE LEATHER BOOTS AND SHOES require cleaning with white boot cream, and polishing with a soft duster.

WHITE BUCKSKIN AND CANVAS SHOES. Mix pipe-clay to a cream with water and put it on the shoes, leaving it till dry, and then brushing it off, or apply Propert's buckskin cleanser with a moistened sponge. Dry the shoes in a current of air. If after cleaning these shoes are rubbed with powdered pumice stone, they will resist the dust more effectually.

SATIN SHOES. If these are only slightly soiled they may be easily cleaned at home with petrol, care being taken not to use the spirit near a fire or artificial light. The process of cleaning should take place several days before the shoes are needed for wear, and they should be dried in the open air, but never before the fire, If very badly

soiled, satin'shoes should be sent to the cleaners, as they cannot be done successfully at home.

SUEDE SHOES. Dust the shoes with a soft brush, and place them upon their trees, tying up the laces (if any). Wash them with warm water, using a sponge but not making them wet. Do not use soap. Wipe with a soft cloth, and place in a current of air to dry. Another method is to rub the shoes with a rag dipped in turpentine, changing the rag as it becomes soiled. Keep them upon the trees until quite dry.

BOOT BUTTONS. To fix these pierce holes in the leather with a stiletto; put the shanks of the buttons through the holes; sew a piece of tape at the top of the shoe and thread the other end through the shanks one after another, sewing the end firmly below the last button, and catching it down to the shoe here and there with a needle and thread to fix it. This method saves many stitches, and is excellent for children's boots.

TAGS. Considerable annoyance is often caused by the loss of the tags from laces, while they are yet in a good condition otherwise; in such a case, a piece of melted wax, pressed round the end of the lace, and shaped to a point, will form a good substitute for the tag which is missing.

SUEDE BELTS, BAGS, PURSES, Etc. To clean such articles, first remove the dust with a

brush; then, with gentle friction, rub the article all over with a piece of very fine sand-paper (No. 00), changing the paper as it becomes dirty.

BROWN LEATHER BAGS are cleaned in the same way as brown boots after being well dusted.

BLACK LEATHER BAGS need to be dusted carefully before being rubbed with a rag dipped in a mixture of I teaspoonful of sweet oil, and 2 teaspoonfuls of milk. When dry, they should be polished with a clean leather.

WATERPROOFING BOOTS. The following mixture will be found efficacious for resisting snow and wet:

Take ½ pint linseed oil

🕯 pint turpentine

2 oz. beeswax

2 oz. burgundy pitch.

Mix these ingredients together over a gentle heat and pour into a jar. When required for use, warm the mixture, and rub it well into the leather before a fire or in the hot sunshine.

BOOT CREAM.

Take 2 oz. white wax

I oz. beeswax

4 tablespoonfuls of turpentine.

Shred the wax finely and put it in a jar with a gill of water; stand the jar in a saucepan and leave over a low heat till dissolved, then beat into it more boiling water until it is of the consistency of thin cream; then add the turpentine. Leave this mixture white for cleaning white kid; add lamp black to clean black boots, or yellow ochre to render it suitable for brown boots. This cream nourishes the leather and keeps it supple.

PATENT LEATHER. A good polish for this kind of leather may be prepared from 4 table-spoonfuls of cream and 2 tablespoonfuls of linseed oil. Make these lukewarm, mixing them well together, and store in a jar. Apply with a soft piece of rag and polish with a duster until a brilliant effect is produced.

LIQUID BLACKING.

Take 6 oz. of ivory black (charcoal and phosphate of lime)
6 oz. treacle
1½ oz. olive oil
1 oz. oil of vitriol
½ pint sour beer
1½ gills water.

Mix the ivory black, treacle and sweet oil together; mix the oil of vitriol with the water, then add it to the other ingredients. Let it stand for four hours; then add the beer; keep it in a jar tightly corked. The brush with which it is applied may be kept in the jar if the handle is passed through the cork.

The ivory black must be finely ground or it

will "settle" rapidly; and oil of vitriol, being a powerful corrosive, must be diluted with water before it is added to the other ingredients; its effect is also partly neutralized by uniting with the lime in the ivory black, and it improves the quality of the blacking without injuring the leather.

BLACKING PASTE.

6 oz. ivory black

4 oz. treacle

i oz. linseed oil

I oz. oil of vitriol.

To prepare, mix the vitriol with 3 tablespoonfuls of water, mix all the ingredients together adding sufficient water to form a thick paste; put it into tins, which must be kept covered.

The treacle preserves the leather and gives adhesiveness, while the oil tends to soften it.

All blackings and boot creams should be applied sparingly all over the article to be cleaned, which should afterwards be thoroughly polished, or the surface will quickly become sticky and dull.

CHAPTER XXII

CARE OF FURNITURE; CLEAN-INC OF WOOD; FURNITURE POLISHES

WELL-MADE furniture of good line and quality may always be regarded as an asset, and if treated with proper care will not deteriorate with age, but will improve as time elapses.

To keep all furniture free from dust, using soft dusters, and brushes to get well into the carved parts and crevices, is of course an indispensable

duty.

Two dusters are necessary, one with which to hold the piece of furniture so that finger marks may not appear upon the surface, and the other with which to perform the work. Beginning at the top, work downwards, carefully removing the dust, which if merely "flicked" off will settle again. Shake the duster frequently out of doors, and use a damp cloth where much dust has been allowed to accumulate. Where dust has settled into the crevices of carved furniture, a

little paraffin applied with a small round brush will effectually remove it.

Very highly polished wood, such as rose-wood, or ebony, should be treated with a very soft duster (an old silk handkerchief is excellent), and no furniture polish should be used.

POLISHING. This process both preserves and cleanses the furniture. First dust the piece thoroughly, then, holding it with a duster, begin at the top and apply polish sparingly with a piece of soft flannel, rubbing it well into the wood; afterwards polish with a dry soft duster, using a soft brush for the carved parts to remove the polish which may adhere to them.

STICKY FURNITURE. Nothing is more unpleasant to the touch than furniture which has become sticky, as is often the case with articles exposed to atmospheric changes, or to the vapour arising in the bathroom. Wash it with warm soapy water, thoroughly dry it, and polish with furniture cream sparingly used.

NEGLECTED FURNITURE may be cleaned by rubbing it with linseed oil or paraffin; washing it with equal parts of vinegar and warm water; or washing it with cold tea.

After employing one of these methods, rinsing, drying and polishing with a furniture polish or cream must be done to complete the work.

HIGHLY POLISHED MAHOGANY is kept in

good order by cleaning it with methylated spirit and warm water, in proportion 2 tablespoonfuls to 1 pint of water. After application the furniture should be wiped very dry and polished with a soft duster, the use of a cream not being necessary.

FURNITURE POLISH. Although many good polishes and creams may be purchased ready for use, the following home-made recipes will prove reliable, give excellent results, and be found cheaper:

POLISH. Mix equal parts of turpentine and linseed oil, with half as much of vinegar and methylated spirit. Keep in a bottle, which should be well shaken before using, and apply with a piece of flamel or soft rag. The vinegar and turpentine remove the grease and cleanse the wood. The oil preserves, and methylated spirit gives a gloss.*

FURNITURE CREAM.

Take I oz. beeswax

2 oz. Castile soap

2 oz. white wax

½ pint turpentine

 $\frac{3}{4}$ pint boiling water.

Shred the wax and dissolve it in the turpentine in a jar standing in a saucepan of hot water;

*By kind permission of Mrs Pillow this recipe has been taken from Newsholme & Scott's Domestic Economy.

shred the soap and dissolve it in the water; when cool, mix these ingredients together (if hot, the mixture will curdle). Being of a creamy consistency, it should be stored in jars or bottles.

It is necessary to polish furniture at least once a month, unless in constant use, when once a week it may be advisable to go through the process. New furniture can be kept in excellent condition for a considerable period by rubbing it with a flannel wrung out of very hot water, and polishing it with a dry soft duster.

HOT PLATE MARKS, unsightly and often difficult to remove, may be remedied by rubbing with either (a) linseed oil or good furniture polish, and applying a little spirits of wine with a soft rag; (b) linseed oil and salt, or (c) spirits of camphor. Rub round and round, until the mark disappears; where it has been neglected, several applications may be necessary.

STAINS ON POLISHED FURNITURE. Perfume marks are difficult to eradicate, when the polish has been destroyed. Whenever possible, wipe up the perfume without delay and rub well with a rag dipped into paraffin; leave it for twenty-four hours, and then polish with furniture polish. If not entirely successful, this method will certainly cause the stain to fade considerably.

INK stains must be treated with a mixture of I tablespoonful of warm water and I tablespoon-

ful of nitre mixed together, and rubbed well in with a rag, after, which the wood should be polished with furniture cream and a soft duster.

SCRATCHES may be rendered almost unnoticeable after a few applications of a mixture of equal parts of linseed or camphorated oil and turpentine, applied to the marks with a pad of soft linen and left for twenty-four hours.

BRUISES OR DENTS, if not very deep, may be removed by the following method: Make a pad of several layers of brown paper; moisten it in warm water, and lay it over the dent; when the wood is thoroughly damp and warm, apply a hot iron to the paper until it is quite dry. In some cases it may be necessary to repeat the treatment, which must not be used for French polished articles, whose surface would be ruined by it.

CRACKS. These frequently appear in wood which has not been well seasoned. The splits can be hidden by pressing firmly into them beeswax which has been melted to the consistency of putty. By smoothing the surface with a knife, and sandpapering the surrounding wood, to obtain the wood dust which should be worked into the beeswax, a "finish" is produced, and when the re-varnishing has been completed, the cracks in the wood will have almost, if not quite, disappeared.

WORM - EATEN FURNITURE. Paraffin

squirted into the holes, or carbolic oil well rubbed in for a few days in succession, will probably prove efficacious, but if the wood is much eaten, home methods will be of no avail, and the furniture should be sent to an expert for treatment.

STORING FURNITURE. Before putting aside furniture for any lengtd of time, clean it thoroughly, and rub it all over with mutton suet or linseed oil to prevent "dry rot" from making its appearance.

For upholstered furniture, brush, beat, remove all stains, and thoroughly clean the pieces; scatter moth preservative on the cushions and tapestry; sew the whole in an old sheet or covering, and be sure the place for storing is dry. For furniture which is to be warehoused, the preparation may be the same, but as a rule the contractor undertakes the packing.

OLD OAK which is dirty and greasy can be cleaned by washing it with warm beer. For carved parts a brush should be used, and the wood wiped dry after application.

The following mixture is also good for the

purpose:

Boil together and allow to cool I quart of beer, I oz. dark brown sugar, and $\frac{3}{4}$ oz. finely shredded beeswax.

Rub it well into the oak and when dry polish with a soft duster.

Linseed oil rubbed in, or a little paraffin sparingly used, and the wood afterwards polished

is another good method for cleaning and preserving old oak.

PITCH PINE furniture should be washed in warm water with a little dissolved soap in it, dried thoroughly and polished, care being taken not to allow too much wetting of the wood.

LEATHER COVERED FURNITURE. For stains rub with a cloth slightly moistened with petrol, and polish with a duster. Turpentine may also be used in this way to remove stains. To clean leather, covered furniture, first dust it thoroughly; rub with a rag dipped in beaten white of egg, and afterwards polish with a dry duster. If it is shabby, the following polish will help to restore the good appearance: Equal parts of linseed oil and vinegar, put into a bottle, shaken well, and applied with a soft flannel. Rub the mixture well into the leather, and polish with a duster, but take care not to use too much of the liquid, or there will be difficulty in obtaining a good lustre afterwards. Pegamoid and American leather should be washed with warm soapy water to which a little ammonia has been added, dried and polished, before using the white of egg or mixture above recommended.

If scrathced, apply a little leather stain, which may be purchased in various colours at furnishing stores, and when dry, use a furniture polish in the ordinary way.

CLEANING UPHOLSTERED FURNITURE. Beat and brus h thoroughly both back and front,

paying special attention to the parts with buttons. If the article is very dirty, rub it with hot bran, using soft clean dusters, afterwards brushing away all traces of the bran carefully.

CANDLE GREASE ON UPHOLSTERY should be scraped off the surface with a blunt instrument. Then lay brown or blotting paper over the spot, and press with a warm iron until the grease is absorbed by the paper, which must be constantly changed during the process.

OIL OR BUTTER can be removed with benzine or petrol. If the stain is an old one, it should be covered with French chalk or with a paste of Fuller's earth and water, which must be left for twenty-four hours, and then brushed off, the treatment being repeated if the stain is still visible.

INK. Remove as much as possible with blotting paper, then rub the spot with a little milk, benzine or petrol being employed to remove any grease left by the milk. In the case of curtains or table covers, after using milk, the spot may be washed with warm soapy water.

When the furniture is upholstered in silk or is light in colour, it should not be beaten, or the material may become split or marked; it should be well brushed and rubbed with a soft clean duster. The under parts of chairs must not be forgotten, and need to be beaten thoroughly to get rid of the dust.

WICKERWORK. If the furniture be upholstered, remove all cushions or protect them in some way, before proceeding with the cleaning. Brush and dust the article thoroughly, using a fairly stiff brush (an old clothes-brush will serve), not omitting the under parts; and polish with a clean dry duster.

Brown wickerwork may be cleaned by rubbing it with a rag dipped sparingly in paraffin, afterwards leaving it in the open air to get rid of the smell or with a little furniture polish used sparingly. Soap and watershould be avoided when cleaning coloured wickerwork, as it will remove the stain and destroy the polish.

White wickerwork should be brushed and dusted thoroughly; washed with salt and water, I tablespoonful of salt to I quart of water, a nail brush being used to reach all crevices, and care being taken not to make the wickerwork wet; rinse with warm water, wipe and dry in a current of fresh air. If made too wet wicker will crack. When quite dry, the article may be polished with a little furniture cream.

If very dirty, soap may be found necessary, but this has a tendency to render the wickerwork yellow. Drying near a fire, too, is not advisable, as it will often cause the wickerwork to creak afterwards.

Another method employed to keep white wickerwork a good colour is to apply oxalic acid and water, salts of lemon and water, or the juice of a lemon and water, afterwards thoroughly rinsing away the agent to prevent the acid from

destroying the wickerwork. I oz. of oxalic acid or salts of lemon, or the juice of one lemon, will be enough for 2 quarts of water, and the first two agents should be dissolved with a little boiling water prior to adding the remainder.

RUSH AND CANE SEATED CHAIRS. The same treatment as that recommended for white wicker may be followed, but a rubbing with warm bran may be found sufficient for rush chairs, if they are not too dirty.

TO TIGHTEN LIMP CANE CHAIRS. If possible do the work out of doors on as fine a day as is available. Wash the chair with hot water and soda, using 2 oz. of soda to 2 quarts of water. Wipe it dry, finishing by placing it in a free current of air. Be careful that the soda does not touch the framework of the chair, or the polished surface may be damaged.

PAINTED WOOD. Furniture, doors, skirting boards, and all other painted parts of the house when unvarnished must be kept clean by dusting, and all finger-marks from doors, etc., removed as soon as possible. Avoid washing paint more often than is necessary, as the polish is thereby destroyed; once or twice a year is usually enough for all practical purposes. When it must be washed, however, first dust it thoroughly, using a brush for the crevices; then wash with warm soapy water, using a flannel, sponge or leather; starting at the top, work downwards, washing

only a small portion at one time. Wring the sponge fairly dry to avoid superfluous water running down and thus smearing the paint; rinse with warm water and wipe dry, afterwards polishing with a dry clean leather or soft non-fluffy cloth.

A pointed wooden skewer may be used covered with a piece of flannel for working into the corners, but on no account must a metal skewer take its place, owing to the danger of its piercing the covering and scratching off the paint.

VERY DIRTY PAINT may be cleaned by rubbing it with a little paraffin and salt, afterwards rinsing it well and polishing with a dry soft cloth.

WHITE P. INT AND ENAMEL should be washed with warm water which has been boiled, and a little soap jelly. Boiled water is softer and consequently requires less soap to make a lather than unboiled water, and the less soap used the less paint-destroying alkali will be present. After washing the paint, rinse it with tepid water, dry with a soft cloth and polish with a leather. Cold water, if used for rinsing, tends to harden the soap too quickly, rendering the surface of the paint sticky and streaky in appearance.

DELICATE TINTS. For light-coloured paint, squeeze a piece of flannel out of tepid water until nearly dry, dip it into precipitated

whiting, rub the paint gently, rinse with tepid water and polish with a soft duster very gently.

VARNISHED PAINT. The same treatment should be carried out as for unvarnished paint, but the use of hot water must be avoided, or the surface of the varnish will be destroyed. Substitute instead, cold boiled water to which a solution of borax has been added, in proportion 2 tablespoonfuls of borax to 4 pints of water; the borax must be dissolved in a little boiling water before adding to the cold water.

OUTDOOR PAINT. Keep this dusted, using a brush for all crevices, and clean by rubbing the paint all over with a rag dipped sparingly into a little paraffin, and polish with a soft duster.

This method will clean, freshen the colour, and reduce the risk of the blistering of the paint by the heat of the sun.

CREAKY DOORS AND GATES. This unpleasant defect may be remedied, and the hinges kept in good order, by the application of a little soap, or, better still, a small quantity of oil.

CHAPTER XXIII

CARE AND CLEANING OF CAR-PETS; MATS; RUGS; MATTING; ETC. CLEANING OF LINOLEUM; WALL PAPER; TO KEEP NAILS IN PLASTER

PERHAPs no part of the household property is subjected to harder wear and rougher usage than the carpets, rugs and floor-coverings. They are placed at the mercy of the feet of all who come and go, and suffer much from the constant moving of the furniture over their various surfaces.

It is clear, then, that these should claim a very large share of the housemaid's careful attention, for not only will their life be prolonged thereby, but the unwholesome dust, which must collect upon them owing to the continual traffic, and which is so ready a means whereby infection is spread, may be well kept under by methodical cleaning at stated periods, and by exercising reasonable care daily.

CARE OF CARPETS. It is unwise to expose the carpet to strong sunlight; unless protected, most colours will either fade badly, or at any rate lose their fresh brightness. A daily sweeping with a patent carpet sweeper or a dust pan and brush is necessary to keep the carpet in good order, while a weekly thorough sweeping will keep it free from dirt.

Avoid dragging heavy furniture over the carpet, or it will quickly wear thin in places, and in the case of a pile carpet the habit gives rise to unsightly marks; see that a hearth cloth with paper underneath is spread over the carpet prior to cleaning the fireplace; have all brooms, brushes, and utensils perfectly clean before applying them to the carpet; remove crumbs after meals, and stains at the earliest opportunity.

SWEEPING. Prepare the room by covering up or removing all ornaments and movable furniture, and pinning up or taking away the curtains, etc.

Sprinkle one breadth of the carpet at a time with well-washed tea-leaves, damp torn paper, or some patent preparation for preventing the dust from arising, and sweep with a firm steady stroke, away from the operator, and in the direction of the pile of the carpet, proceeding with one breadth at a time. Take a good stroke, and do not "dig" the brush into the carpet.

Pay particular attention to the edges, and if

the carpet completely covers the floor use a hand whisk for the corners.

A good housemaid will never lean upon the broom; it is a bad habit which will bend and soften the fibre.

After the sweeping is done, the dust should be collected with a dustpan and brush, and burned.

TAKING UP AND BEATING CARPETS. Loosen all the tacks with a tack-lifter or flat end of a hammer, and remove them from the carpet, which may then be evenly folded.

If the work is to be done at home, it is essential to choose a fine day for the purpose, and to see that a strong clothes-line is firmly fixed, over which the carpet should be hung.

After well beating first the back, then the front, lay the carpet flat on the ground and sweep it; re-hang it on the line and leave it until the room is ready for it.

REVIVING THE COLOURS. Relay the carpet, wash with a good carpet soap (directions for use will be found on the soap), doing a small piece at a time, and avoiding too much water upon the carpet. Do not allow the carpet to be walked upon until quite dry, and if possible let at least one day elapse before the room is used again. Instead of the soap I tablespoonful of salt and I tablespoonful of vinegar to I gallon of water can be used to wipe the carpet with.

A second method for reviving colour is to prepare a mixture of:

2 oz. yellow soap, $\frac{1}{4}$ oz. soda,

i gallon boiling water,

mixing all until the soap is dissolved, and washing the carpet with a clean cloth wrung out of the solution, doing a small piece at one time and rubbing in the direction of the pile. Rinse with a cloth wrung out of warm water, wipe very dry, and avoid walking upon the carpet until perfectly dry.

STAIR CARPETS, having to undergo even more hard wear than those laid in the rooms, require taking up more frequently; twice or thrice a year is usually enough, but a daily light sweeping with a dustpan and brush is a necessity, and once a week the rods should be removed, the carpet well brushed, and the rods cleaned before replacing them.

PROFESSIONAL CARPET BEATING. Where it is inconvenient to perform the work at home, carpets may be sent away to be treated by firms whose business it is to carry out such work. The small charge per square yard of carpet varies slightly according to the kind and "make," and will generally include the collection and delivery of the goods; should taking up and relaying be required also, the firm will usually undertake this work for a small additional sum.

Carpets may also be cleaned by compressed air or vacuum process.

STAINS ON CARPETS. If neglected, stains upon carpets will not only ruin the appearance, but will themselves become very difficult to remove. It is essential therefore to give prompt and careful attention as soon as possible after the accident occurs.

GREASE SPOTS. Candle grease should be removed as far as possible with a blunt instrument, before placing over the spot a piece of brown paper, which should be pressed with a hot iron, the position of the paper being continually changed, until all the grease has disappeared.

OIL STAINS. Clean with a rag dipped in petrol or benzine, beginning at the outside edge of the stain and working round and round to the centre. Both these agents being highly inflammable the work should be done in the daylight, and never in the vicinity of a light or fire.

A second method is to make a creamy paste of Fuller's earth with warm water; apply it to the stain, leave for twenty-four hours, and then brush it off. Repeat the process if necessary.

PAINT. Rub with a rag dipped in turpentine, removing any greasy mark which may be left with benzine or soapy water.

LIME. Remove this as quickly as possible before it takes the colour out of the carpet; rub the mark with water and ammonia (I teaspoonful of ammonia to I quart of water).

BLACK INK. Soak up the ink at once with blotting paper; rub the place with a rag dipped in milk which has been boiled and skimmed; wash with warm soapy water and rub very dry.

RED INK. Rub the spot with rag dipped in lemon juice; wash with warm soapy water and rub very dry.

PARAFFIN. Put a layer of oatmeal over the stain, leaving it for twenty-four hours; brush it off into a dustpan, and leave the carpet exposed to a fresh current of air to remove the smell.

TAR. Cover the stain with grease; wash in warm soapy water, and dry thoroughly; then rub the place with benzine or petrol to remove the grease.

BLACKLEAD may be removed in two ways; either (1) by washing with a cloth wrung out of warm soapy water, taking care not to make the carpet too wet, rinsing and drying thoroughly; or (2) by making a thick paste of Fuller's earth with warm water and a little ammonia; applying it to the marks, allowing it to dry and then brushing off with a dustpan and brush. The process may be repeated if needed.

SOOT. To remove traces of this, cover with coarse salt and leave for a short time; sweep up both salt and soot together, and if a stain remains, wash it with warm soapy water.

MOTHS IN CARPET. Turn back the carpet, wring out a flannel from very hot water and lay it over the carpet; iron it with a very hot iron, and lay cedar wood under the carpet before replacing it. This method will kill any eggs left by the moths, and the cedar wood will keep them away in the future.

MATS AND RUGS, manufactured from carpet materials, should be treated in the same way as that recommended for carpets.

SILK MATS. To clean them, shake them gently; rub all over with warm bran very carefully, to give a lustre to the silk; then shake out the bran.

WHITE AND GREY ANGOLA MATS, made from cats' hair, are very soft and silky. To clean these, shake out the dust, then sprinkle them with powdered plaster of Paris, leaving it on for half an hour, after which it may be rubbed well into the surface of the mat, which should then be again shaken to release the powder. If the mat be very soiled, two or three applications with the powder may be necessary before the work is satisfactory.

ANGORA MATS, made from the long, fine, silky goats' hair, from which also are manufactured lustrous mohair fabrics, are cleaned by rubbing into them warm bran to remove the dirt, afterwards shaking them to get rid of the bran.

DOOR MATS should not be taken by the corners

and shaken to remove the dirt therefrom, or the mat is liable to become torn. The proper method of cleaning them is to lay them face downwards, beating the back with a stick until the dirt is out of them; having removed the dirt, scrub with a bass broom, using tepid water and salt (2 tablespoonfuls to a pail of water), changing the water frequently when dirty. Leave the mats flat, and do not use them until perfectly dry.

COCOA-NUT MATTING may be taken out of doors and beaten to remove the dust, then scrubbed with warm water and salt (2 table-spoonfuls to 2 quarts of water), and afterwards rinsed with cold water, and hung on a clothesline to dry. If very dirty, a little soap may be used instead of the salt.

VARIOUS MATTINGS, such as Chinese and Indian, may be cleaned, if self-coloured in the same way as wickerwork (see Chapter XXII), but if coloured, the use of salt and water or bran water should be resorted to.

It is important to see that matting is wetted only sufficiently to remove the dirt; if made too wet the original shape may not be regained when the matting is dry.

LINOLEUM, Kamptulicon, or cork carpet, should be kept clean by brushing with a long-haired broom. When necessary wash it with warm soapy water, using a flannel; rinse in warm clear water, and wipe dry. Polishing with a little

milk gives a fine gloss, and does not make the linoleum slippery beeswax and turpentine, if used, should be applied sparingly and well rubbed in, or the marks of feet will be visible almost immediately. Where old people and children use floors covered with linoleum, it is unwise to risk accident by polishing with beeswax and turpentine.

Furniture polish will give a good appearance, but does not render the linoleum so slippery as beeswax and turpentine, and a higher gloss may be obtained with its aid than with that of milk.

CAUTION. Never allow loose mats to rest upon polished lineleum, or they may slide away from under the feet, and cause serious accident.

WHAT TO AVOID. Soda and soap extracts should not be used for cleaning linoleum, since they may have a bad effect upon the colour. Scrubbing brushes will roughen it and injure the pattern upon the canvas, while leaving it wet will cause rotting of the material.

WALLS. Before proceeding to clean the walls, all pictures must be removed, and the walls themselves swept vertically with a wall-brush or long-handled broom over the head of which a duster is tied. Remove and shake the duster from time to time during the process, and do not forget to treat the ceiling and cornices in the same way.

Very dirty walls may be cleaned by wiping

them, after the sweeping, with dough or stale bread, a vertical stroke being, used.

TO PREPARE THE DOUGH. Mix I lb. of flour with nearly ½ pint of cold water, kneading it well. When using dough to clean walls, turn in the outside frequently as it becomes dirty; bread may have the dirty part cut off thinly from time to time. The method of treatment with dough and bread should only be adopted when quite necessary, or the consequent roughening of the paper will cause dust to adhere very quickly to the surface.

VARNISHED WALL PAPER. The best way of cleansing this is to wash it occasionally with paraffin and water. After dusting the walls, put a gill of paraffin into a bucketful of warm water and allow it to get cold. Squeeze out a cloth in the solution, and wipe the walls over, taking a small piece at a time, and wiping it thoroughly dry. Polish with a soft duster or leather.

STAINS ON WALL-PAPER. To remove these make a paste of pipe-clay and cold water, spread it over the marks but do not rub it in; allow it to remain for twenty-four hours, then brush carefully with a soft brush. For very old stains this treatment is not always effectual.

TO KEEP NAILS IN PLASTERED WALLS a mixture of plaster of Paris and water should be prepared. Drive the nail into the wall, remove

it and fill up the cavity with the plaster of Paris; place the nail in its position and drive it into the paste. This will harden, and when dry will render the nail perfectly firm for holding pictures, etc.

GREASE ON WHITEWASHED WALLS. To remove stains of grease from whitewash, dissolve ½ lb. of caustic soda in a quart of warm water; wash the wall with this, and rinse with clean cold water.

CHAPTER XXIV

CARE & CLEANING OF TOILET BRUSHES; COMBS; HOUSEHOLD BRUSHES; PATENT . CARPET SWEEPER; SPONGES; LEATHERS; LIST OF BROOMS

TOILET BRUSHES. Brushes may be divided into two classes, toilet and household. The former are made in three parts, the bristles, the stock and the back.

The very best quality of bristles are obtained from the Russian wild boar, and, being cut to the required length, may be used for brush-making in the natural, slightly brownish colour, or bleached, in which condition they are known as "Lily White" bristles. The prices of bristle hair-brushes vary according to the size and quality.

Cheaper brushes may be manufactured from split whalebone, the special bones for the purpose being taken from the throat of the whale. These, when very finely split, are frequently sold for bristles. Natural bristles are also supplied by the Black Hog, and brushes manufactured from them have a brindled appearance, but are excellent for hard wear.

Very soft brushes, such as are used for infants, are fitted with the ends of the bristles from the wild boar, and are usually bleached white.

The stock is the piece of wood into which the bristles are secured by doubling them in half, passing the doubled ends through small holes in the wood, and threading a brass wire through the loops.

For the backs of brushes a variety of materials may be used; among the most popular being wood, ivory, tortoise-shell, and silver. These may be secured to the stock by glueing, screwing, plugging, or hammering on, as in the case of silver or metal backs.

CLEANING HAIR BRUSHES. Prepare the brush by removing all hair from it with the comb; wash in warm soapy water with a little ammonia added (I dessertspoonful to 3 quarts of water); rinse in clean warm water to remove the dirty soap, and then in cold water to harden the bristles; shake well and wipe the back if wet, hang it up in a current of air to dry. Nine to ten hours should be allowed for the brush to become thoroughly free from moisture, the bristles near the stock holding the water for a considerable time after washing.

When washing brushes, care should be taken that the backs and handles do not become

immersed in the water, which will destroy the polish; to avoid this hold the brush by the back and work the bristles gently up and down in the water until clean, but do not rub them or they will soften.

A tablespoonful of borax may be substituted for the ammonia, but will require to be dissolved in boiling water before being added. A little common salt in the cold rinsing water will help to keep the bristles firm and white (I tablespoonful of salt to I quart of water).

The practice of drying brushes near a hot fire will warp the backs and discolour the bristles.

The backs of silver brushes or those with silver monograms should be cleaned before washing the bristles, and wooden-backed brushes may be polished with a little furniture cream when quite dry.

CARE OF BRUSHES. Constant washing will soften the bristles, therefore avoid placing them in water oftener than is necessary. A gentle rubbing with a clean cloth will keep them clean for a considerable time.

Remove hair from the brush each time it is used, and protect from dust by using a brushbag, or drawer.

NAIL BRUSHES, after use, should be rinsed to get rid of any soap which may adhere to them. and placed in a position which will permit of their drying thoroughly. Superfluous soap may be cleared from the bristles by steeping the

brush for some hours in cold water and salt (I tablespoonful of salt to I quart of water).

TOOTH BRUSHES, after use, should be rinsed in cold water, and placed where they may easily dry; the modern "vase" for tooth brushes is a great improvement upon the old-fashioned covered-in stand.

The use of disinfectant, such as Sanitas, or a little borax in the water when soaking the brush, will keep it sweet and fresh A tooth brush should never be used after the bristles begin to come out; to prevent this in the case of new brushes, they should be soaked for twenty-four hours in water before heing used.

CLOTHES BRUSHES, frequently made from horse hair, should be treated in the same way as toilet brushes, omitting the ammonia. If only slightly soiled they may be cleaned by rubbing into the bristles a little warm bran, or salt and sand in equal parts, care being taken to thoroughly remove all bran, etc., when the brush is clean. This method will not soften the bristles. It is a good plan to have two brushes—a black-haired one for dark clothes, and a white-haired for light clothes.

COMBS are made from such substances as ivory, horn, tortoise-shell, xylonite, and gutta percha. The last-named are very strong, and the teeth will not split, as is the case frequently with horn or shell combs. When choosing combs, notice

that the teeth are perfect, not too sharp, and in no way split or rough.

CLEANING. Avoid putting combs into water more than is absolutely necessary, as the action tends to remove the polish, split the teeth, and warp the comb generally. If very dirty, however, wash them as quickly as possible in warm soapy water, using a brush.

Combs may be cleaned by rubbing them on thread, the strands of thread being stretched over the backs of two chairs, and rubbed between the teeth of the comb. Finish by inserting soft paper or rag between the teeth, and protect the floor by spreading paper. Comb cleaners may be purchased from any good hair-dresser for a small sum.

HOUSEHOLD BRUSHES, manufactured from hair, fibre, or bass, are made in two parts, the hair and the stock.

The hair is sometimes fastened to the wooden stock in the manner adopted for toilet brushes, but more often it is secured in the holes with pitch or a similar substance. The stocks are sometimes varnished or they may be of unvarnished wood.

CARE OF HOUSEHOLD BRUSHES. Use them only for the purpose for which they are intended, and when not in use, keep them hung up away from the dust, in a cupboard if possible. Never allow them to stand on the bristles, and see that all fluff is cleared from them immediately after sweeping. Although clean brushes are necessary to prevent their soiling the carpets, they should not be washed so often as to take the stiffness from the bristles.

Where no cupboard is available in which to keep the brooms, tidies for fixing to the wall may be obtained, made of deal.

Before new brushes are used, soak them for some hours in cold water, and thoroughly dry them to fix the hairs or bristles

TO CLEAN HAIR BRUSHES. Scrub the wooden stock if unvarnished, or wash it with a flannel and soapy water if painted or varnished; wash, rinse and dry the brush in the same way as that recommended for toilet brushes. A convenient way in drying a long-handled broom is to place it across the backs of two chairs. As the brushes are not greasy ammonia is omitted when washing them.

CLEANING WHISK BROOMS. Remove the fluff; scrub the stock and handle if of plain wood; wash the broom in tepid water, rinsing in cold water with 2 tablespoonfuls of salt ahded to each pailful. Whisk brooms are made from a coarse grass grown largely in America, although the best quality is obtained from Italy. When used for beds, these brooms should be seldom washed, but occasionally leaving them to soak for twelve hours in water will prevent the fibre from becoming brittle.

BASS OR GARDEN BROOMS. These are manufactured from a strong grass obtained from the undergrowth in the American forests. It is said that this name took its rise at the time when the fibre was bartered for Bass's beer. To clean these brooms, follow the method laid down for whisk brushes.

SCRUBBING BRUSHES are made of bass or fibre, and after use should be well rinsed, to get rid of any soap, in warm water, and put up on end to drain and dry.

SAUCEPAN AND SINK BRUSHES will require a little soda in the water in which they are washed, so that all grease may be removed, then rinsed and hung up.

BLACKLEAD BRUSHES may be washed by placing them in a pailful of warm soapy water with a little soda. Stir them round, changing the water as it becomes dirty, and scrub the wooden parts of the brushes.

PATENT CARPET SWEEPERS. These may be obtained of various makes, in many designs, and are most useful additions to the ordinary household utensils. For the daily removal of surface dirt and crumbs from the carpets, they are excellent; care must be exercised in keeping them clean by emptying all dust immediately after they are used, and releasing all fluff from the brushes, which will also require to be taken

out and washed from time to time. When worn out, new brushes may be bought to replace the old ones. These patent sweepers should not be made to take the place of a brush in the weekly cleaning of a carpeted room.

PATENT VACUUM CLEANERS are daily gaining popularity. These useful machines remove dust by suction, and the many inexpensive, practical, and easily managed patterns now obtainable bring them within the reach of even the most modest householders.

After use they require to be emptied and put aside in a suppoard out of the way of dust.

LIST OF BROOMS. The following comprehensive list fill give an idea of what kinds of brooms and brushes should be at hand in the house for the carrying out of the ordinary cleaning routipe:

Long-handled carpet broom
Long-handled hair broom
Short whisk broom
Short hair broom
Turk's head or wall brush
Furniture brush
Scrubbing brush
Boot brushes (set of three)
Blacklead brushes (set of three)
Plate brush
Flue brush
Hearth brush

Saucepan brush Bass yard brush

Patent carpet sweeper.

The prices of these vary in different localities, and according to the quality of the brushes. It is false economy, however, to purchase inferior brushes at a cheap price; they will wear badly and require renewing more often than well made ones, and give but unsatisfactory results with the cleaning.

SPONGES, as used in the house, are the skeletons of a soft porous marine organism of a low order, and the best qualities are found in the Levant and in the West Indies. Those of a fine, close texture are better and more durable than the coarse, honeycomb variety.

New sponges often contain a quantity of sand, to remove which the sponge should be steeped in cold water, which must be frequently changed until the evil is remedied.

CHOICE. The small "cup" sponges are excellent and soft for toilet use, but the coarser qualities are used for house work, as they are less expensive.

Take note of the texture when selecting honeycomb sponges, and see that the holes are not so close together that the sponge will readily tear. Very lightly coloured sponges have often undergone a bleaching process, and the texture been weakened in consequence; for this reason they should be avoided. CARE. Take care that soap is not rubbed upon the sponge, or it is apt to become slimy. Rinse all sponges well after use, squeezing them as dry as possible without wringing them, and hang them up to dry. For this purpose a sponge basket is excellent, as the sponges will dry quickly if placed in a current of fresh air, which is enabled to reach all parts. For carrying sponges while travelling, aluminium boxes will be found more satisfactory than rubber bags.

If soap has been used upon a sponge, rinse it well in warm water, then in cold water, and dry out of doors.

Should the soap become very apparent, soak the sponge in:

(a) Vinegar and cold water, 2 parts of vinegar to 1 part of water.

(b) Salt and cold water, 2 tablespoonfuls of salt to a quart of water.

(c) Boïax and warm water, J oz. borax to a quart of water, or

(d) Bicarbonate of soda and warm water, 2 oz. of soda to 2 quarts of water (dissolve soda first in a little hot water).

(e) Washing soda and warm water, 2 ozs to I quart of water.

After using any of these means, rinse the sponge in warm water, afterwards in cold water, squeezing and drying the sponge in the open air. If the sponge is not then clean, as a last resource only, the following method may be tried:

Dissolve half a teaspoonful of salts of lemon in

a little boiling water and add 2 quarts of warm water. Squeeze the sponge in and out of this solution several times; rinse in warm water in which one tablespoonful of carbonate of soda has been added for each quart of water, the effect of this alkali being to neutralize the bad action of the acid; squeeze the sponge and dry it in the open air. This is a very good method for a badly discoloured sponge.

LEATHERS. The best and softest household leathers are obtained from the skins of the chamois, a species of antelope, not much larger than a goat, living in the mountainous regions of Western Europe and Asia, and possessing wonderful leaping power, which renders it difficult to capture. The cheaper house leathers, however, are more generally manufactured from sheep and goat skins. They should be chosen for their softness, and those most free from seams should be selected, as they will wear better and last longer than those much sewn.

CARE. Mark and keep each piece for the purpose for which it is intended and do not allow them to get very dirty before cleaning.

WASHING. Shake the leathers to remove the dust; wash them by gently squeezing in warm soapy water, rinse in warm water, and again in warm soapy water; pass them through a wringer in a cloth, or squeeze in a cloth as dry as possible, but avoid wringing with hands. Dry the leathers

in a warm place, rubbing them frequently while this is in progress to prevent their drying stiffly. Undue heat or cold will harden the leathers, and render them useless.

LOOFAHS should be cleaned at least once a week by washing them in warm soapy water, rinsing in first warm and then in cold water, and hanging them in the open air to dry.

CHAPTER XXV

THE CHOICE, CARE AND CONTENTS OF THE LINEN CUPBOARD; MARKING OLD LINEN; BLANKETS; LINEN FOR THE LAUNDRY; LIST OF LINEN

IN every household a place known as the "linen cupboard" should be set apart as a safe repository for the table and house linen. Space does not always permit of more than a few shelves in a cupboard for this purpose, but in large establishments, so important is the care of the linen considered, in many cases a properly heated and ventilated room is specially designed.

In selecting a spot for the linen cupboard, care should be taken to note that it is warm and dry, preferably against a wall which is warmed by the kitchen flue, or with hot water pipes. The bathroom should not be chosen, since the vapour from the bath will damp the linen. A fair-sized

room, well-lighted, warm, dry and airy, with shelves on two sides of the walls, a large strong "lock-up" cupboard with a couple of drawers and two or three large tin-lined chests for storing blankets, curtains, etc., would be regarded as an excellently equipped place for the care of linen. In the lock-up cupboard may be kept all new linen, and specially dainty articles which are only used occasionally, and the drawers will be found useful for tray cloths, fancy cloths, d'oyleys, muslin goods and other small items.

SHELVES. These should be sufficiently large to hold comfortably properly folded bed and table linen; they should be at least two feet apart. They may be ventilated by means of holes druled in them, or the pieces of wood comprising the helves may be left with between to admit the air. All shelves should be covered with clean holland, secured with drawing pins, easily removed when the covers require washing. Curtains of holland, hung from a rod fastened to the top shelf, and sufficiently long to protect all the shelves from dust, should be provided, or pieces of holland, cut to the length of the shelves and fixed underneath each with hooks and rings, sufficiently wide to cover the wall space, to lie on the shelves and be turned up over the clean linen, will answer the same purpose.

A separate pile should be arranged with plenty of room for each kind of article, and to assist the memory a small label may be attached to the front of the shelf before each pile, displaying the name of its contents. A notebook, kept hanging up in the cupboard, containing an inventory of the linen, with prices and dates of purchase, will give the housewife a useful record of the "life" of the various goods.

CONTENTS. Linen is a textile fabric manufactured from the fibre of the flax plant, and although known to the ancient Egyptians, was first made in England in the reign of Henry III by Flemish weavers, who settled in the country. The principal seat of its manufacture in the United Kingdom to-day is the North of Ireland, with Belfast as the centre, but large quantities are also produced by Leeds and Dundee.

Linen damask, such as is used for tablecloths and serviettes, is a figured fabric, made in many forms. The name originated from the City of Damascus, which was famous for the weaving of silk threads of many colours in various designs; combinations of silk and wool or cotton are also used in damask weaving.

The principal contents of the linen cupboard, comprising tablecloths, serviettes, sheets, pillowslips, bolster cases, bedspreads, dusters, and other household cloths, being expensive items, should be of good quality. Cheaper articles, although costing less at the outset, are not economical, and will require to be frequently renewed.

TABLE-CLOTHS. Double damask is the best material for these, and although it is more expensive, it wears well, has a good appearance to the end of its "life," and does not lose its beauty

after being laundered.

Single damask-faced material for tablecloths is calico masquerading as linen. Calico, a white, unprinted cotton cloth, deriving its name from Calicut in India, whence it was originally imported, when dressed in the same way as that adopted for damask, may be mistaken for linen; the latter, however, may be distinguished by the double set of threads used in the weaving, which gives it the two aspects so noticeable in a good cloth.

With regard to the designs upon damask, the small patterns, such as spots, sprigs, and running patterns are cheaper than large central designs with borders.

Always buy tablecloths sufficiently large for the table; whether purchased by the yard or made ready for use, they should have at least an allowance of 18 to 20 inches to hang over the edges of the table on all sides.

Kitchen table-cloths should be strong, but need not be so fine as the better cloths; unbleached damask is a suitable material, and will speedily

become white after washing.

SERVIETTES OR TABLE-NAPKINS are made of damask in various sizes, the most popular being 22, 27 and 31 inches. The smaller sizes are suitable for use at breakfast, and the larger for dinner; very small serviettes are also made for use at tea. Manufactured of double damask, to

match the table-cloth, they are usually made with a small plain hem, but the more expensive method of double hem-stitching is very effective.

SHEETS may be bought ready for use, or the sheeting may be purchased by the yard. Various widths are sold, and care should be taken to obtain sheets sufficiently large for the beds; not only are small ones uncomfortable, but they are liable to have the threads pulled and stretched, which causes them to give way. For single beds, 72 inches wide material is needed, and for double beds at least 90 inches wide, the length of the sheet being from $3\frac{1}{2}$ to $4\frac{1}{2}$ yards.

Sheets are made from cotton or linen material, twilled or plain, and bleached or unbleached. Linen are the most expensive, costing on an average twice as much as cotton, but their life is much longer, and the colour will remain good longer, if they are properly laundered.

Hemstitching at the hem looks effective, but if the threads be drawn out for the purpose, the material is weakened, and the hem is apt to

become torn easily.

Cashmere or woollen sheets are often used for children and delicate or rheumatic people.

PILLOW-CASES of cotton or linen, the latter being the more cool and restful, may be hemstitched, plain or frilled. For every-day use the plain patterns will be found the most satisfactory. Pillow-cases should always fit the pillows, if too large they are unsightly, and if too small the pillow becomes hard.

BOLSTER CASES of linen or cotton are made to fit the bolsters, and may be fitted with more elaborate ends to hang over the side of the bed, having the appearance of a "monster cracker," with a draw string at either end close to the bolster.

These, as well as pillow-cases, should be placed over an under cover of calico, which is to preserve the tick.

BEDSPREADS, if of printed cotton, should be of suitable design, and tone with the colour scheme of the room. White linen embroidered or hemstitched is good for hard wear, effective and readily washed.

Bedspreads should be made large enough to well cover the bed, and hang to considerable depth over the sides.

TOWELS. For bedroom towels, the best material for general use is undoubtedly linen huckaback, while white diaper is soft for face towels.

Towels may be made with fringed, hemstitched or plain ends, the plainly hemmed ones being considered stronger than the others which may be torn and destroyed by frequent washing. The size of hand towels should be at least 1½ yards long by ¾ yard wide.

Cotton towels are usually a bad investment, as they do not absorb moisture as quickly as linen ones, and will become thin and poor more readily.

BATH TOWELS or Turkish towels should be

large, and of good quality if required for hard wear. They may be bought in several degrees of coarseness, and if provided with a hem instead of a fringe are more durable.

BATH SHEETS are similar to bath towels in texture, but are much larger in size.

KITCHEN TOWELS should be bought in different patterns, so that the cloths may be easily distinguished and kept for the purpose for which each is intended, fine cloths for tea and glass ware, coarser for dinner ware and knives, etc. It is well to provide a goodly supply of these, hemmed, marked and with a tape loop for hanging up.

OVEN CLOTHS of coarse unbleached linen are kept solely for use at the oven, and should have a loop by which to hang.

HEARTH CLOTHS may be made of hessian, and require to be of a size large enough to cover the entire space in front of the fireplaces while the cleaning is being done.

DUSTERS are made of either cotton or linen, the former being the softer. They should be of a convenient size for use, and plenty of them should be supplied for the housework.

CARE OF LINEN. All pieces returning from the laundry should be examined, so that the linen

may be repaired, and all buttons, tapes, etc., which are missing may be replaced, before it is stored in the cupboard.

It is essential that linen should be perfectly dry before being put away, or it may become mildewed, and the health may be impaired should the articles be inadvertently used unaired.

Stains on table-cloths, etc., should be removed before the linen is sent to the laundry, for should they be overlooked by the laundress, the boiling will make it a difficult matter to remedy the evil afterwards.

Small holes or weak places should be mended as soon as they appear, and every article should be worn as equally as possible. To ensure this being done, the newly washed linen should be put at the bottom of the piles each week, and that which a given out for use should be taken from the top of the piles.

Another good plan is to divide the shelves into two parts, placing all the clean linen as it comes in on the left side, and using from the right side only until all has gone; then transferring the pile from the left to the right. This method will save the lifting of heavy piles in order to place the newly washed articles underneath.

Linen should be given out weekly from the store cupboard by one person, who should have entire charge of it.

Yearly additions to the linen store will prolong the life of the goods, and those articles which get the most wear will, of course, require to

be renewed more often than those which are less used.

Bags of lavender or verbera put amongst the linen give it a delicate and fresh perfume, and little bags are not infrequently placed inside the pillow slips to give a refreshing fragrance.

The lavender or leaves should be well dried before being put among the linen, or stains may

appear.

STORING LINEN. Before putting linen away for any length of time it should be properly mended in all weak places, have the stains removed, be well washed and rinsed to remove the starch, put through fairly strong blue water, and mangled. Avoid ironing, which may cause it to become yellow. The storing place should be perfectly dry and airy.

New linen need not be washed before storing, but should be wrapped in blue tissue paper and

put into a dry place.

TESTS FOR LINEN. Before buying table linen, it is wise to obtain a few patterns and put them to the following tests:

With a magnifying glass see that the threads are close and flat; embroidery linen is woven with a round thread, but table linen is subjected to treatment by hot rollers, and the threads are flat. With the tip of the finger moisten the material, and note that the dampness very quickly appears on the other side.

Crumple the material to detect the presence of any dressing of chalk or lime, and scan threads closely to make sure that the warp and weft are of equal quality.

MAKING. Whether house linen is bought ready for use, or made up from lengths of material purchased at the shop, it will usually be machined unless the purchaser stipulates for hand work, which is more costly, and of greater value.

Table-cloths and serviettes with narrow hems oversewn and well pressed are preferable to

those with plainly hemmed sides.

Sheets require a 2-inch hem at the top and a 1-inch hem at the bottom. The material should be cut straightly with the thread and not torn off; here again sewing has a better appearance than plain hemming. Cutting with the thread is quite easy if the material has been washed, dried and soaped where the threads are to be drawn, or trouble may be avoided by picking up the end of a thread and cutting along it in the desired part of the material.

Pillow slips may be made to fasten with tapes or with buttons and button-holes, also with stud holes and studs, but these last should be of rustless metal, or other material, otherwise they will quickly cause iron mould. Both buttons and studs are neater looking than tapes, which are

not easy to tie flatly.

MARKING LINEN. House linen should always be fully marked with name, date, number and number of the articles in its set. For example:

4 Evans 12

The figure 4 represents the number of the article. and 12 the number contained in the set: "Evans" the name of the owner, and 1907, the year when the linen was new.

Drapers will often mark the linen in ink free of charge when it is purchased. If the marking is done at home, see that the goods are first washed, as in some cases the dressing will prevent the ink from being fully absorbed, and it will wash out very soon. Use a quill pen for the work, for the metal of a steel pen will combine with the ink and form an acid, which will corrode upon the pen and cause the stuff to wear into a hole where the marking is done.

Embroidered marking for table and house linen should be done in satin stitch over padding, and a good embroidery cotton used; for linen goods linen thread should be substituted for cotton. Fine marking with cross stitch is both effective and neat; it should be done with red ingrain cotton which will not be injured by the boiling at the laundry. Cross stitch transfer letters for stamping on to the material may be purchased, but the better method of working is to count the threads to ensure getting the letters straight with the stuff. Another means of executing this kind of marking is to tack a piece of fine canvas to the material, work the letters upon it, afterwards drawing the threads of the canvas out.

Cash's letters are useful for marking. They are woven with colours upon fine white tape, which may be cut into lengths and sewn to the article.

USE OF OLD LINEN

TABLE-CLOTHS, when showing signs of wear in the folds, may be re-hemmed at one side, having one or two inches of material cut off for the purpose. This will bring the folds into another part. If holes at the corners are caused with the clothes pegs, strengthen them with tape.

When the cloths are too much worn for use upon the table, they may be cut down and the best parts utilized for serviettes, d'oyleys, sideboadr cloths, carving and tray cloths, etc.

SERVIETEES, when discarded, may be used for fish d'exleys or tray cloths, or may form an excellent lining for the knife and silver trays.

SHEETS when worn in the centre may be cut in two, the selvedges sewn together, the worn parts cut away, and the new sides hemmed. Although narrower the sheets will then be found to serve for smaller beds.

Cast-off sheets, too, will be found useful for the underslips of pillows and bolsters, for dust sheets, and, if not patched, for ironing sheets. The softer pieces may be saved for surgical purposes, polishing furniture, paint cloths, rubbers, etc. Many people utilize old sheets to cover the blankets on the bed, immediately under the bed-spread.

PILLOW-CASES when finished with can be made into useful bags in which small articles

may be boiled in the copper; or for making under-slips for pillows, and curtain bags.

TOWELS should not be thrown away, for they will provide soft rubbers and cloths for washing the bedroom china.

CURTAINS, if of dimity, chintz or cretonne may be used for dust sheets, or lace curtains may be cut down into short blinds for the kitchen and scullery windows.

COUNTERPANES will often cut into smaller ones, or will form good dust skeets and fire-cloths.

TABLE-COVERS for the toilet table can sometimes be re-trimmed and used again, or will make nice soft rubbers.

BLANKETS should be composed wholly of wool, and be light and warm, having a soft silky feeling. Witney produces a very fine class of blankets, while Yorkshire and Wales are noted for very good qualities for hard wear. Cheap blankets, known as "union" blankets, are made with a cotton warp and wool weft, the cotton being concealed by a process termed "teazling," which creates a woollen pile on the surface; they are heavier, less warm, and shorter lived than pure wool blankets.

Blankets are usually sold by the pair, and care should be taken to select them of a suffi-

ciently large size to tuck well in all round the bed for which they are intended.

MARKING with wool at one corner is the best method. Wool of a colour to match the button-holing at the ends should be chosen, a piece of canvas tacked to the edge, the letters worked upon it in rose stitch, and finally the threads of the canvas drawn out. Take the stitches right through the blanket as well as through the canvas.

MENDING HOLES and thin places by darning should be carefully done with wool of the same colour as the blanket. If the holes are so large as to need patching, a piece of blanket of the same thickness as the ground should be employed.

USE OF OLD BLANKETS. When large blankets become thin, they may be doubled, secured at the edges with blanket stitch, and employed as under blankets, or pieces may be joined together to form under pads for the stairs. They will be useful for ironing upon if there are no patches, and for First Aid purposes they are invaluable. They also make excellent floorcloths.

LINEN FOR THE LAUNDRY. Table-cloths used for all meals should be provided clean at least twice a week, but where separate cloths are used for each meal in the day, they will very well last clean for a week.

SERVIETTES will need to be changed at least twice a week.

SHEETS should be fresh every fortnight, or the method of changing one each week, placing the former top sheet to the bottom, may be adopted.

PILLOW-CASES require to be clean every week; BOLSTER CASES once a fortnight, and BED-ROOM TOWELS twice a week.

KITCHEN CLOTHS, as many of each kind as will be necessary for use, should be given out once each week. By this means, it will be easy to check the numbers in use, and prevent their getting excessively dirty.

SOILED LINEN should never be kept in bedrooms, but put into a basket, stored in a room which is not used for sleeping, and sent to the laundry once each week.

Upon a regular day in the week collect all soiled linen throughout the house, sort the different articles into heaps, count the number of each kind of article and enter it in a book kept specially for the purpose; a duplicate list should be sent to the laundry with the clothes bearing the date clearly inserted thereon. Enter all articles in a systematic order, and not mix household and personal indiscriminately. Tie all the clothes together in a sheet, or in bags, which must be deposited in the laundry baskets.

The maids should collect their own washing and hand to the mistress or responsible person, with a list of all the articles.

RETURN OF CLEAN WASHING. When the articles come back from the laundry, open the packages and sort the various things into piles; check everything carefully as regards number, correct goods, etc., and note that they are properly washed. Make a note of anything which may be missing and set on foot at once inquiries respecting it. Compare the prices charged, to see if they are in accordance with the laundry list.

See that al' defective goods are mended before being put aside, and air everything thoroughly before storing the linen in the proper place.

LIST OF L'NEN. Housekeepers in small households being often at a loss to judge what is actually necessary in the way of linen for general use may find the following list of assistance:

- 3 Dinner cloths for constant use.
- 2 Dinner cloths for special occasions.
- 3 Breakfast cloths.
- 3 Afternoon teacloths.
- 12 Breakfast serviettes.
- 18 Dinner serviettes.
 - 3 Carving cloths.
 - 6 Tray cloths.
 - 3 Sideboard cloths.
 - 3 Dinner wagon cloths.
 - 3 Kitchen table cloths.

- 3 pairs of sheets for each bed.
- 3 Pillow cases for each bed.
- 2 Bolster cases for each bed.
- 4 Towels for each person.
- 6 Towels for visitors.
- 2 Bedspreads for each bed.
- 3 Bath towels for each person.
- 3 Toilet covers for each chest.
- 2 Sets of mats for each dressing table.
- 4 Blankets for each bed.
- 2 Under blankets for each bed.
- 3 Roller towels for each roller.
- 12 Glass cloths.
- 12 Tea cloths.
- 12 Dinner ware cloths.
 - 6 Lavatory cloths.
 - 3 Oven cloths.
 - 2 Hearth cloths.
- 36 Dusters.
 - 6 Dust sheets, although the number of these will depend upon the amount of furniture to be covered up.
- 12 Dish cloths.
 - 3 Pudding cloths.
 - 2 Jelly cloths.
 - 2 Plate leathers.
 - 6 yards of house flannel.
 - 6 yards of flannelette to be cut into squares, hemmed and used for polishing metal.

CHAPTER XXVI

THE HOUSEHOLD MENDING

A VERY necessary part of the household routine is the tedious task of mending the linen and clothing of the family.

Important no doubt it is, for if neglected the clothes will soon wear out; much expense of frequent renewing is saved by a stitch in time, and the trouble of many stitches is avoided if the goods are inspected and repaired before being sent to the laundry, which is apt to return them in worse condition than that when they arrived.

After washing, every article should be examined and any further mending which is necessary should be done before it is stored away. Towels, table-cloths and sheets, whose corners show signs of tearing, should be strengthened with tape; kitchen and oven cloths, and lavatory towels should be provided with tape loops by which to hang them up, for neglect of this duty will result in much damage being done by the hooks.

It is wise to set apart a particular day or time for the stockings and family clothing, so that the mending may be kept regularly and methodically up-to-date. Too much time, however, should not be spent in attempting to repair garments not worth the trouble; in such a case it is better to discard them, and use the best parts for other purposes.

Generally speaking, mending may be roughly divided under two heads: (a) patching and (b) darning, the success of both depending upon a proper application of the understanding of the

methods and rules for mending.

PATCHING is a method whereby a better piece of material is inserted into a garment to take the place of a worn part cut away. The material chosen for mending must be of the same kind as that from which the garment is made, and should not be quite new. The patch must be large enough to well cover the hole and the worn parts round it, and if to be placed near a seam or hem should be fitted into it by one of the sides.

The patch must be fixed to a straight thread, laid quite flat to avoid puckering, and due regard should be paid to the nap of the material, way of the thread, and right or wrong side of the piece inserted.

SELVEDGE THREADS, passing from end to end of the material, consist of even and straight threads, not easily breakable and give considerable resistance against pulling.

WEFT THREADS are those passing across the warp from side to side of the material. These are usually of a slightly wavy appearance; will give and stretch and frequently may be broken easily.

CALICO PATCH. Having cut a sufficiently large piece of material to well cover the worn part of the garment, turn down the edge on the right side one-sixth of an inch all round, and place the patch with the raw edges on the wrong side of the garment, tacking it securely.

Hem the patch to the garment very neatly and remove the tacking; turn the garment to the right side, cutting away all the worn part to within five-eighths of an inch of each corner measured diagonally. Cut up quarter of an inch diagonally at each corner from the cut edge, and turn in the raw material, tacking it firmly; sew all round the edges and put a stitch at each corner thereby fixing the garment to the patch; remove all tacking threads, and press the part with a warm iron.

PRINT PATCH. This must be inserted on the right side of the material, and the pattern must be carefully matched with the surrounding parts to render the patch as little apparent as possible. Turn down the edges of the patch three-eighths of an inch; tack it firmly to the garment, and sew neatly all the way round using cotton the colour of which predominates in the print.

Turning to the wrong side, cut away all the worn parts of the material to within three-eighths of an inch of the sewing stitches upon the patch; and with a blanket stitch fix the raw edges of the patch and the garment together. When finished, remove the tacking threads and press the whole wih a warm iron.

DRESS PATCH. For a material with a design upon it, match the pieces carefully, taking care that the threads upon the patch are in the same direction as those upon the garment. Turn in the patch to within about half inch of the edges, and tack it firmly on the right side of the material; sew it to the garment, and cut away the worn part on the wrong side to half inch distance from the stitches of the patch. Mitre the corners and overcast or buttonhole-stitch the edges of both garment and patch, taking each separately. Damp and press with a warm iron.

FLANNEL PATCH. Tack the patch firmly on the wrong side of the garment, leaving the edges raw and not turned in. Beginning at the lower left-hand corner of the patch and the selvedge side, herringbone it to the garment, taking all the stitches through to the right side. Turn to the right side of the garment, and cut away the worn part to within eight threads of the lower line of stitches showing from the patch; begin at the top left hand corner and herringbone the garment to the patch.

DARNING. Darns on linen are worked with flax

or flourishing threads of the same thickness as those from which the material is woven; for woollen material a fine angola or silk may be used, and if there is difficulty in matching the colour, a few threads from the selvedge may be withdrawn for the purpose.

Begin the darn in the direction of the selvedge, starting three-eighths of an inch away from the tear and proceeding to the same distance beyond it on the other side. Take up two threads and leave two, leaving two threads between each line, and taking up in the second row those which were missed in the first row.

Darning is usually done upon the wrong side of the material, and in the case of washing materials, loops of one-eighth inch in length should be left on all sides to allow for shrinkage; for non-washing materials less may be allowed.

HEDGE OR CATCH TEAR DARN. In a hole of this sort both the warp and the weft threads are torn.

Begin the mending by drawing the edges gently together with a thread to prevent fraying, and proceed with the work on the wrong side of the garment. Begin the darn the weft way of the material commencing $\frac{3}{8}$ inch to the left of the tear, and darn until three-quarters across the weft way, then unthread the needle, and with another thread work three-quarters of the darn across the selvedge way, beginning the same distance from the cut. Again unthreading the needle take up the weft thread again and finish

the darn in that direction, subsequently completing the other part with the selvedge thread. The darning must continue $\frac{3}{8}$ of an inch past the end of the tear. Remove carefully the threads used for drawing the hole together, and press with a warm iron.

This method will keep the corners of the tear from puckering.

TABLE LINEN. Table linen may be repaired by patching or darning.

PATCHES must be inserted on the wrong side and neatly darned to the cloth, after which the worn parts on the right side should be cut away and the cloth darned to the patch, the edges being left raw and not turned in.

A neater method of inserting the patch into the cloth, after having carefully matched it in accordance with the design upon the damask, is to tack it straightly on the hole, fray out the edges of the patch and with a needle darn each thread separately into the body of the cloth to a distance of about half to three-quarters of an inch from the place at which the patch joins the hole; turn the work over, cut the edges of the hole square with the patch, fray out its edges in like manner, and darn in the threads as before into the body of the patch. This gives a flat surface to the patch, which after having been laundered is scarcely noticeable.

DARNS. For a cut, the darming must be done

both in the direction of the warp and weft of the material, the edges being first drawn together; this is necessary to prevent fraying.

A better but more tedious method is by Dutch darning, where the hole is practically re-woven with the needle and threads, the pattern of the damask being faithfully copied.

BUTTONS. Unpierced linen buttons are the best for common use upon house linen.

Double material should form the ground for the button, and where it is necessary to fix it to a single part of an article a small patch should be first fitted, to prevent the button from tearing apart from the material and to give extra strength. Commence by securing the cotton on the right side under the place where the button will rest, and do not sew it on too tightly, make a stem to the button by twisting the cotton four times round the threads which hold it; this will enable it to stand up from the material and render it easier to fasten.

Finish off on the wrong side of the stuff with a couple of back stitches.

TAPES. When fixing tape as strings, cut the pieces to the required length, turn in the raw edge at one end, and then fold into a square place the square on the wrong side of the garment with the outer edge to the edge of the hem; sew the tape to the band and hem round the rest of the square. Make and hem a small fold at the other end of the tape.

LOOP TAPES. For towels and other articles loops are useful as means by which the goods may

be hung up.

For these, use tape about four inches long; turn in the raw edges, and fold a square at both ends; stitch the inner side of each square to the band of hem of the article, and fell round the other sides. Always use linen tape, which is more economical and more lasting than cotton.

HOOKS AND EXES. These must be attached to the garment firmly and neatly. Overcast or buttonhole the rings of the hooks on the material, and fasten the hook well down by strands of thread across the shank. Overcast or buttonhole the rings of the eye to the material, and then overcast or buttonhole the top part of the eye to conceal the metal, fastening off with back stitches on the wrong side.

Choose rustless metal hooks and eyes, or much trouble will ensue from iron mould.

CHAPTER XXVII

HOME LAUNDRY WORK

THERE is scarcely a home in which it is not necessary to perform at least a small part of the family washing. In some instances the table linen, shirts and collars are sent to an outside laundry, while the remainher is done at home. In an case a good supply of utensils in the house is essential to ensure the work being satisfactory, and easy of accomplishment, with as little discomfort to the inmates of the house as possible.

The home laundry should possess a mangle, copper, copper stick, clothes horses, two tubs, a wringer, pegs and line, four flat irons, two polishing irons, two goffering irons, an iron stand and holder, a shirt board (if shirts are done at at home), sleeve and skirt board, dipper, enamelled bucket, clothes basket, folding stand for tubs and, of course, the ironing blanket and sheet.

Where a great deal of washing is done at home a washing machine is an excellent time and

labour saving utensil. Harper-Twelvetree's villa washer with a dolly action will be found perfectly satisfactory.

CARE OF UTENSILS

THE COPPER is generally fixed in the house, but should this not be the case a portable copper, for heating by gas or otherwise, may be purchased, or a large oval enamelled iron saucepan may be used, and kept entirely for boiling the clothes.

TO CLEAN THE COPPER. After the fire has burned out, empty nearly all the water from the copper, and scrub the inside thoroughly, throwing away the dirty water. If greasy, clean with bathbrick and turpentine, or with Brook's soap; rinse first with hot water, then with cold and wipe dry.

Scrub the copper lid, and rub any painted metal work from time to time with a rag dipped in paraffin.

THE MANGLE is a machine with wooden rollers used for smoothing clothes, etc. In small homes where a large mangle would occupy too much room, small ones can be bought to clamp on the kitchen table when in use, and to be stored in a cupboard when not required. Others may be lowered after use into a stand which may be closed and converted into an excellent table.

The tension must be tightened while the

mangle is in use, but loosened while the machine is idle.

Do not allow the mangle to be used for wringing, as constant wetting will injure the rollers, which should be kept covered and free from dust.

TO CLEAN THE MANGLE. Scrub the wooden parts with soap and warmwater, but do not scrub the rollers too frequently, as the action tends to roughen them. Clean the cog wheels with a rag dipped in paraffin to free them from dust and grease, and lubricate them occasionally with a very little machine oil.

THE WRINGER. This useful article is generally attached to the washing tub, and the rollers being of indiarubber should not be used for anything which has come directly out of boiling water, or the surface may perish.

TO CLEAN THE WRINGER. Cleanse the cog wheels and working parts with a rag dipped in paraffin, and scrub the woodwork. Wipe dry the rollers, which if greasy or stained may be rubbed with rag dipped in turpentine, afterwards being washed in warm soapy water, rinsed and dried. Release the tension when the machine is not in use.

TUBS. For washing purposes these are usually of wood, galvanized iron, porcelain or enamelled. If wooden they require to be washed inside and outside after use with warm soapy water, and

well rinsed. Cold water should be left in them to prevent their shrinking, which would cause leakage. Galvanized, or enamel and porcelain baths should be washed, cleaned, rinsed and dried before being hung up, or put upside down until needed again for work.

IRONS may be of "flat" or "box" pattern. Flat irons are those generally used for all ordinary purposes; these may be bought in many sizes and weights, numbers 5, 6, and 7 being the most useful. The working parts should be of well polished smooth steel, free from dents, and the handles firm and comfortable. The usual cost is $2\frac{1}{2}d$. per lb.

CLEANING FOR USE. Rub the iron on brown paper upon which is sprinkled powdered bath-brick; dust it and rub with a rag very slightly moistened with turpentine. Occasionally flat irons need to be washed in hot water and soda, wiped dry and placed on end on a stove to get thoroughly dry.

TO STORE FLAT IRONS. Rub them all over with saltless fat, wrap them in brown paper and store in a dry place.

TO PREVENT IRONS RUSTING IN A DAMP PLACE. Rub well all over with saltless fat, which of course must be washed off before the iron is again used.

TO SEASON NEW IRONS. Flace them on the

stove for several hours, clean in the usual way and allow them to cool, repeating this process for several days in sucression.

IRONING SHIELDS are useful for slipping over the heated flat iron; being made of nickel, run smoothly over the surface of the linen, without fear of soiling which may be the case when the iron is badly cleaned.

BOX IRONS. These are heated with hot bolts placed inside the box, three heaters being required for each iron.

POLISHING IRONS. Made like an ordinary flat iron, with an oval surface of polished steel, they are used for polishing table linen, cuffs, collars and shi is and produce a high gloss. The most useful sizes are Nos. 1 and 2.

GOFFERING-IRONS are used for frills and lace, and are made in two sizes for wide or narrow frills. Care should be taken not to destroy the surface by overheating the iron, which should never be put into a fire; heating over a gas flame is a better method.

THE IRON STAND used as a rest for the iron is made either round or to the shape of the iron, and high enough to prevent any scorching of the ironing sheets upon which it rests.

IRON HOLDERS should be made round in

shape, of several thicknesses of cloth sewn together with round of leather (old kid gloves will serve), intermixed to keep the heat from the hands; a neat appearance to the whole is given by an edging of braid. A cover of linen or calico, which may be removed for washing when soiled, should be placed over the iron holder.

THE IRONING BLANKET composed of an old blanket doubled, or of ironing felt which may be bought by the yard, should be large enough to extend a few inches over the edges of the table.

IRONING SHEETS. Old sheets, if not patched, may be utilized for the purpose, or strong calico made up to the required size is very suitable. At the corners of each sheet two tapes should be fixed wherewith to tie them to the table legs, so that the sheet may remain smooth while in use. Every care should be taken to avoid scorching the sheet or it will soon wear into holes, and it should always be kept perfectly clean.

CLOTHES LINES are made of rope or galvanized wire. Rope should not be left out of doors when not in use, but folded and put away in a bag out of the dust. Occasionally it will need to be boiled in soapy water and rinsed. If a wire line be used, it must be carefully cleaned before the clothes are hung out, or there is danger of their being marked.

PEGS should be collected and kept in a bag after

use; if left on the ground they will mark the clothes with dirt. Wash and dry them occasionally to prevent any possibility of the wood stain discolouring the clothes. Soak new pegs before using them, and, if possible, choose those without metal upon them, and see that they are smooth or the clothes may become torn.

CLOTHES BASKETS should be kept clean by scrubbing them with water and soap, rinsing and drying them thoroughly.

CLOTHES HORSES, when dirty, should be washed, scrubbed, rinsed and dried, and the tapes should be renewed as soon as they are worn out. Nails must also not be allowed to rust in the wood or tapes, thus creating a medium for iron mould.

A SKIRT BOARD, used for ironing skirts and petticoats, should be covered with blanket or felt sewn tightly and with an outside covering of sheeting which may be tied with tapes, or made like a bag for the board to slip into. When they are not in use, a holland bag or wrapping of brown paper will preserve the boards from dust.

A SLEEVE BOARD, used for ironing sleeves of blouses and dresses, is covered in a similar manner.

A SHIRT BOARD is required where shirts are to be ironed, for the fronts and glazed parts. Such boards are covered in the same way as the preceding ones.

TIME FOR WASHING. Since much discomfort and annoyance is caused by irregular methods in the household, a special time should be set apart to be devoted to the washing, once a week or once a fortnight as the case may require. It is always more conducive to the general health of the family to get rid of the soiled linen as soon as possible, but where there is only a small quantity, once a fortnight is usually considered a reasonable period.

DAY. Most people who "wash" at home select Tuesday as the best day for the work, Monday being devoted to making alle preparations, such as removing stains, steeping the clothes and other necessary preliminaries. If left until late in the week, the washing is apt to remain unfinished when Saturday arrives, and part of the ironing is left until the following Monday, which plan is neither good management nor good for the clothes.

RULES. First collect and sort the soiled articles into bundles as follows:

- (a) Flannels and coloured garments
- (b) Fine white things
- (c) Table linen
- (d) Coarse things
- (e) Handkerchiefs.

Mend everything which requires reparation, except the stockings. Remove all stains from the clothing and linen. Steep all the white cotton

things over night in cold water. Coarse kitchen things should have a little soda dissolved and added to the steeping water. Lay the copper fire and fill the copper in readiness to start work early in the morning.

Make the soap jelly according to the recipe given below.

REMOVAL OF STAINS. With white cotton, linen or damask, the trouble and time involved in the removing of stains is generally fully repaid by the results achieved All common stains will, as a rule, yield readily to simple treatment, but if neglected, they will demand greater care, and even chemicals must sometimes be employed.

TEA, COFFEE AND COCOA STAINS. If fresh, these all usually disappear if boiling water be poured over them. If, however, they have dried in, prepare a mixture of one teaspoonful of borax dissolved in a little boiling water, with half a pint of cold water added to it, and steep the stained part in it for half an hour, then bleach in the sunshine; if very badly marked leave in the mixture for a night.

If the treatment is not successful, steep the stained article in a solution of one teaspoonful of chloride of lime and half a pint of water for fifteen minutes, after which rinse it thoroughly.

FRUIT OR WINE STAINS. If freshly made, rub with salt and pour boiling water over. If an old stain, place the part over a basin, rub in a

little salts of lemon and pour boiling water over it, afterwards thoroughly rinsing in warm water to which has been added a fittle carbonate of soda (r teaspoonful dissolved in half a pint of water). Should the stain not then be removed, apply the chloride of lime treatment.

INK STAINS. Treat at once with milk which has been boiled and from which the skin has been removed, using the milk tepid, or rub with lemon juice and salt. If the stain still remains, treat it as for iron mould according to the method given below.

RED INK STAINS. These will generally disappear by washing.

IRON MOULD. Stretch the stained part over a basin and pour on it a little boiling water; rub in salts of lemon, and pour more boiling water over it; then, to neutralize the effect of the salts of lemon upon the fabric, rinse in a solution of carbonate of soda and water (I teaspoonful to half pint of water).

Salts of lemon is a virulent poison, and great care must be taken in using it not to scatter it around, or to allow it to come in contact with cuts or scratches upon the hands; a small bone spoon should be used for applying it.

WOOD STAIN. If slight, this will wash out, but should this means prove insufficient try chloride of lime, as for tea stains.

SCORCH MARKS. Soak the part in borax and water, or rub it with raw onion juice, and if this is not sufficient to remove the stain, soak in chloride of lime solution, but handle it carefully as the scorch will already have weakened the material, and chloride of lime has a tendency also to destroy it if too strong.

PAINT. First remove with turpentine and then wash as usual.

TAR STAINS. Apply sweet oil or lard and then treat as for paint.

MACHINE OIL is best removed by using ether, which may be procured from a chemist.

GRASS STA NS. Apply alcohol, which may be obtained from the chemist.

IODINE. Soak in spirits of wine and afterwards wash in the usual way.

VASELINE. Although this is of a greasy nature, it will set if placed in contact with soap; it is therefore necessary to soak the stain in turpentine or alcohol before putting it into the wasding water.

STEEPING THE CLOTHES. This process softens the dirt, and renders the task of washing lighter. White cotton, linen and damask articles should be steeped for several hours before washing,

care being taken to separate the handkerchiefs, placing them in a receptacle apart from other things with salt added to the water in order to remove the mucus; if they have been useh by persons suffering from cold in the head a little Sanitas in the water will prove a safeguard against infection.

Coarse rubbers and kitchen cloths should not be steeped with other finer and cleaner goods.

Flannels, coloured things, silks and fine laces are not steeped. "

WASHING WHITE THINGS. Having steeped them overnight, rub the clothes in the steeping water and wring them out.

Wash them in hot water, rubbing on the soap, using a board for the very dirty articles, and washing the underclothing well on both sides.

Rinse in hot water, wring and shake.

Put into the copper, bring it to the boil and boil the clothes for twenty minutes.

Take them out of the copper, rinse first in hot and then in cold water.

Pass them through the wringer, shake, and put them into blue water one at a time, and again wring them.

Now select things which have to be stiffened, and starch them. Hang all the clothes out of

doors, if possible, to dry.

A number of small articles for boiling may be put into an old pillow-case or a bag with a small hole buttonholed round, so that they may the more readily be removed from the copper, and there will be no fear of anything being over-looked.

THE COPPER. Fill the copper to three parts full, and when hot add two tablespoonfuls of dissolved soda or two tablespoonfuls of dissolved borax, and a quarter pound of soap cut very thin. As soon as the soap is dissolved, stir the water with a wooden copper stick, and it is ready for the clothes.

HANGING OUT CLOTHES. Always hang the thick part uppermost, and in a position to get as much air as possible.

Collars and cuffs should be threaded upon a tape which is to be tied to the line; do not peg them.

DAMPING. Should the clothes have been allowed to dry too much for mangling or ironing successfully, they must be damped with clear cold water, and folded neatly, then set aside for ironing or mangling. It is inadvisable, however, to let the linen become so dry that damping is necessary; particularly in hot weather with starched things upon which the water marks will often appear after the ironing is completed.

PUDDING AND JELLY CLOTHS. Soak for half an hour with a little soda dissolved in the water. Wash in hot water, rinse, dry and put away. The cloths will require to be boiled occasionally, but soap should not be used.

COARSE THINGS. Rub through the steeping water; wash in hot water to which is added a little dissolved soda. Soap the things well, and rub hard to remove the dirt; rinse in hot water before boiling them for thirty minutes. Again rinse in hot then in cold water, pass through the wringer and hang out to dry. Damp (if necessary), fold and mangle the articles and air them before using again.

When washing coarse things, a board and fine scrubbing brush, may be employed for getting out the dirt. In all washing it is wise to remember that, when rubbing, parts of the garments should be rubbed against one another and not against the hands, which will readily chafe and become sore.

DISH CLOTHS. Wash these with soap in hot water and soda and rinse in hot water first and then cold, before hanging up to dry. Every time the cloths are used this treatment should be applied, and once a week they should be boiled.

PARAFFIN WASHING. When coarse things are very dirty they may be put dry into the copper half filled with boiling water to which two table-spoonfuls of paraffin, two tablespoonfuls soda, and ½lb. soap cut up, have been added. Boil for half an hour, rinse in soapy water, then in hot and cold water; hang out of doors to dry. Where the articles are not very dirty, but are merely disfigured with obstinate marks, one tablespoonful of paraffin added to the water in which they are boiled is usually sufficient.

TO WASH CRETONNE. Shake the dust out. Wash in warm water to which has been added bran water and dissolved soap. Rinse in warm water then in bran water. Stiffen in pure bran water or thin starch; pass through a wringer with a towel placed between each fold; hang out and when partly dry iron the material on the wrong side.

TO WASH CHINTZ. Wash in warm water with bran water and dissolved soap. Rinse in bran water. Rinse in cold water containing one table-spoonful of vinegar to clear, and pass through the wringer.

Pass through very stiff boiling water, starch, partly dry the material, and iron it on the right side, producing a gloss with a polishing iron.

TO WASH PRINT AND COLOURED COTTONS, Wash in warm water with dissolved soap; rinse in tepid and then in cold water. If the colours are not fast, put salt into the last rinsing water in proportion one tablespoonful to one gallon of water. Pass the clothes through thin boiling-water starch, roll up, and iron at once.

TO "SET" COLOURS and prevent their fading the clothes may be steeped as follows before they are washed.

Green, pink or black should be steeped in a bath of water into which is dissolved a couple of handfuls of salt to every two quarts of water.

Blue should be steeped in water to which is

added a tablespoonful of alum and half a teacupful of vinegar to each gallon of water.

Lavender and mauve require one tablespoonful of sugar of lead to each two gallons of water.

Red should be steeped in water to which is added one teaspoonful of vitriol to each two gallons.

Striped blue and white or black and white materials should be soaked all night in salt and water.

TO WASH SILKS. Wash in warm water with dissolved soap. Squeeze and work the material up and down in the water; squeeze out but do not wring with the hands.

Rinse first in tepid, then in cold water, and pass through the wringer. Roll up and press with a warm iron over muslin.

TO STIFFEN JAPANESE SILK. Place it in gum water (one teaspoonful to half a pint of water). Roll it up and leave for half an hour before ironing.

Glacé and corded silks are not stiffened.

For silks which have a glossy surface put methylated spirit into the rinsing water (half teaspoonful to half pint of water). Tussore silk must be dried before ironing to prevent stiffness.

LACES, MUSLIN, SPOTTED NET. Wash in warm water with dissolved soap; rinse in warm and then in cold water.

Stiffen with borax water or very thin starch if necessary (one teaspoonful to half pint of

boiling water), care being taken to impart only the same degree of stiffness as when the material was new. Roll up laces, etc. and iron them until quite dry, and well air the articles before putting them away.

LACE CURTAINS. Shake to remove the dust, steep and put through cold water two or three times to get out dust; then wash them in warm soapy water, squeeze but do not rub them. Rinse in warm and then in cold water. Pass through the wringer, and starch them to a moderate degree of stiffness.

Dry quickly stretched on a curtain frame, and when nearly dry press with a hot iron, and hang up to air. Alum added to the last rinsing water (2 oz. to one gallon of water), will render them non-inflamma set.

TO WASH FLANNEL AND WOOLLEN ARTI-CLES. Prepare four baths filled with warm water. Shake the flannel to remove the dust. Wash on the right side in the first bath with dissolved soap and ammonia (one tablespoonful to one gallon of water). Squeeze out and wash on the wrong side in the second bath of warm water and dissolved soap. Squeeze out and rinse in the third bath of warm water. Squeeze out and rinse in the fourth bath of warm water with ammonia. Pass through the wringer and hang up to dry in a shady place, or in the room not too near a fire. Press with a cool iron when nearly dry and thoroughly air before putting away.

All woollens are washed in the same way, but if coloured ammonia must not be used. Place only one garment at a time in the water, washing the cleanest first, and do not rub but knead and squeeze the articles.

STOCKINGS. The same method of washing is employed as for flannels, but soap is rubbed on to the soles, care being taken to keep them a good shape. Never wash stockings in the water after other flannels or they will be covered with fluff. Ammoniais added to the water to keep them a good colour; it also softens the water, so that less soap is required to produce a good lather.

BLANKETS. The time of year best suited to the washing of these is the spring; they may then be dried in the open air, and those which will not be required for use during the summer months may then be stored in a convenient place.

Choose a fine day for the work; remove as much dust as possible by shaking, and wash in the same way as that employed for flannels, using plenty of water. Ammonia should be avoided where the borders are coloured. Shake well when dry to raise the nap, and be sure that they are properly dry and aired before putting away.

EIDER DOWN QUILTS. Shake to remove the dust, and wash, using the same method as for flannels.

Rinse all the soap out thoroughly, and pass through the wringer, hang up to dry, shaking them at frequent intervals to prevent the down from matting.

SHETLAND SHAWLS. Wash in the same way as flannels, but to the last rinsing water add dissolved borax (one teaspoonful to half pint of water). This prevents the fluff from coming off on the clothes. Pass through the wringer, pull into shape, and pin on a cloth stretched on the table or floor to dry.

VELVETEEN. Wash in the same way as flannels. Do not wring by hand but pass through the wringer; press when partly dry on the wrong side. Some one should hold the iron firmly while the back of the velveteen is pulled over the face of the iron.

SOAP JELLY Shred ½ lb. soap into one quart of water, and let it simmer until clear.

Use enough of the jelly to make a lather.

GUM WATER. Dissolve 2 oz. of gum arabic in one pint of water; strain and bottle. Add as directed to stiffen silk.

BORAX WATER. One teaspoonful of borax dissolved in half a pint of boiling water. To be used as directed for stiffening lace.

BLUE WATER, used to improve the white appearance of clothes, is prepared by placing cold water into a bath, with sufficient blue to make it a fairly "'light blue colour." The blue

is bought in solid form, put into a small flannel bag and kept in a jar to be ready for use.

COLD WATER STARCH. Mix together:

I tablespoonful of starch,

a pint of cold water,

½ teaspoonful of dissolved borax,

4 drops of turpentine.

Strain through muslin and keep covered till required, stir it well before using.

BOILING STARCH. Take:

I tablespoonful of starch

2 tablespoonfuls of cold water

½ teaspoonful of dissolved borax

A thin shredding of white wax

Mix the starch to a cream with the cold water; add the wax and borax, the latter having been dissolved in a little boiling water; stir in boiling water quickly until quite clear and the starch is cooked. Add cold water slowly until the required consistency of starch is obtained.

BRAN WATER. Tie half a pint of bran in muslin and stew it in one quart of water until it is of a rich brown colour. Do not tie tightly but leave room for the bran to swell.

CHLORIDE OF LIME SOLUTION. Mix 4 oz. of chloride of lime with one quart of cold water. Allow it to stand for twenty-four hours, stirring

now and then; strain the liquid through very fine muslin and pour into a bottle.

This solution should be used only as a last resource to remove stains from linen, and great care must be taken that no particle of lime gets near the clothes, as it will destroy the material. Use the solution in the proportion of two tablespoonfuls to each pint of water.

CHAPTER XXVIII

GENERAL, HOUSEHOLD HINTS

ARRANGEMENTS PREPARATORY TO LEAVING THE HOUSE EMPTY; OPENING UP DISUSED ROOMS; AIRING BEDS, ETC.; HOME ECONOMY

ANY people labour under the false impression that when a house is not inhabited the contents do not become dirty. Dust and damp, however, will find an entrance through the cracks and crevices of doors and windows even when these are most carefully barred and bolted.

The good housewife, therefore, will see that the furniture, ornaments, and other possessions are protected against any possibility of damage from common causes, whenever the house is to be shut up for any length of time.

The carpets should be covered with dust sheets or paper, and all draperies removed, shaken, folded and put away. Loose chair covers, toilet covers, etc., should be removed and washed, and all light pictures taken down and put into a place of safety. Large pictures which are left upon the walls may be covered with paper.

The china ornaments should be stored in cupboards and drawers, or if that be impossible they

must be covered with paper.

Cover up all pieces of furniture in dust sheets or newspaper, packing them in the centre of the room, and taking care that nothing be left near the windows or fireplaces, where damp might affect it.

Carefully close all windows and fasten them securely, except in a room where a geyser is installed. Here the window should be left a little way open; screws inserted into the two sashes will serve to prevent intrusion.

Pay special attention to the skylights to

ensure that no wet can penetrate.

Grease steel fenders, fire-irons, and other such things, removing them from the fireplace; shake moth preventative between all blankets and woollen goods, and where lamps are used empty all oil from the reservoirs.

Read the gas and electric light meters, and turn them off at the main tap; turn off the main water tap, and empty the house pipes by turning

on the sink tap.

Fasten all windows, shut the shutters, and pull down the blinds. Leave all cupboards, drawers, sideboards, and wardrobes unlocked, so that in the unfortunate event of burglars gaining access to tde house valuable furniture may not be damaged by being forced open.

Before leaving the house unoccupied, arrange with the superintendent of the local police station that particular notice shall be given to it, and acquaint him of an address to which he may write if necessary. Should special protection be required, a constable may be detailed to carry out the work at a daily charge, or an arrangement may be made whereby a policeman and his wife will act as caretakers, and reside in the house.

The lock on the front door should be a "mortice" lock' (embedded into the wood). To force such a lock is a task of some considerable difficulty; locks which are merely screwed on by the rim may be burst in without much trouble.

OPENING UP DISUSED ROOMS. The airing of the house is, of course, the most important item in its preparations before being re-inhabited.

It is well if the mistress can return a little in advance of the other members of the family, having notified the servants to be in attendance, and having obtained any extra help which may be necessary.

Orders to the tradespeople should be sent beforehand, and the police informed of the return of the householder, so that the special supervision may be relaxed.

Upon arrival in the house, at once open all windows to allow of a free circulation of air into all parts, and turn on the water taps, letting the water run for a short time before using it. Sweep, clean and arrange the rooms, putting up clean curtains, and lighting fires in all rooms, to avoid

any possibility of harm from damp.

Open all drawers, cupboards and wardrobes to air both them and their contents. Beds and bedding, too, need careful attention, and must be thoroughly aired before the beds are made up. On a bright sunny day the bedding may be taken out of doors, but if it be wet or winter weather, they must be arranged round the fire, being turned occasionally, and care being taken that they do not scorch or fall into the fire.

Dust sheets and coverings should be shaken out of doors to rid them of dust, folded and put awayuntil they are washedorsent to the laundry.

ECONOMIES IN THE HOME. Even in the best equipped dvalings, and among the wealthiest families, economy is one of the first essentials to good housekeeping. Wasteful habits and lack of the resourceful mind will very rapidly increase the expenditure, while the methodical and careful turning to account of everything which can be used, and the intelligent employment of a good substitute where it is inexpedient to purchase anything which may not at the moment be to hand, will keep expenses at a minimum, and ensure greater cofmort and happiness to the inmates of the house.

MOPS for many purposes may be made at home from pieces of material which otherwise would probably be discarded as waste. Pieces of old

linen, sheets, towels, etc., may be utilized for washing-up mops of various sizes for the breakfast, tea and dinner china; pieces of woollen stuff to make mops for dusting cornices, venetian blinds, furniture, or for taking up water from the kitchen and scullery floors; while worn-out chamois leather may be cut into strips, tied in the middle and made into suitable mops for window cleaning.

TO MAKE HOME-MADE MOPS. Buy a penny wooden hoop stick with a knob at one end. tie over the knob four small rounds of calico or linen to form a wad.

Cut a strip of calico or linen twenty-six inches long by twelve inches wide, doubling it length-ways so that the raw edges overlap in the centre; cut from both sides towards the centre in strips, leaving half an inch in the middle not cut; wind the long strip round the stick immediately above the knob, and tie firmly in the centre where the material is not cut. Shake the mop into shape, allowing the cut pieces above the tie to fall over the lower ones.

A hole may be made through the other end of the stick with a heated skewer, for a string by which to hang up the mop.

A HOME-MADE POLISHER for linoleum and stained floors may be manufactured from a discarded long-handled broom.

TO MAKE A POLISHER, cut off what bristles

are left upon the broom, padding the part with old stockings firmly nailed to the wood. Stretch over the stockings three pieces of dress material nailed to the broom head, and cover all with a piece of velveteen firmly stretched and nailed to the rounded side of the broom head. When required for use, a clean duster should be tied over the head of the polisher, which may then be employed for quickly and easily rubbing the polish into linoleum or boards, the duster afterwards being removed for washing.

All nails should be on the round side of the broom head, otherwise scratches upon the floor will be the result.

HOME-MADE SINK STRAINER. With a hammer and awl punch several holes into the bottom of a large syrup or tongue tin, performing the task on the ground out of doors and not upon the kitchen table. Such a strainer will temporarily hold tea-leaves, peelings, etc., and will save much labour in cleaning the sink.

OLD STOCKINGS. These will be useful for rubbers to polish the grates and floors.

WOOLLEN VESTS and other garments may be turned to account for rubbers for the paint work, or to apply furniture polish.

SOAP should never be thrown away; however small the pieces may be they are useful for making soap jelly for washing flannels, or may be saved for washing up the china, etc.

EGG SHELLS crushed very finely will be found useful for cleaning enamel ware. An egg shell with a hole made at one end will make a good funnel for bottling strong smelling fluids.

TEA LEAVES when washed may be used for sweeping the carpets, but superfluous water should be drained from them or a water mark may appear on the carpet.

JARS, TINS, WINE AND VINEGAR BOTTLES, when empty, should be washed and put aside for returning to the grocer; who will usually make some allowance for them.

OLD CARPETS. The worn parts may be removed and used as smaller carpets, or small pieces when bound together will form good kneeling pads.

Thin carpets may be utilized as under carpets, or the cut out parts will serve as stair pads to be placed under the stair carpet. Slip mats or convenient rugs, too, may be made from the better parts of old carpets, if a binding be sewn to the raw edges.

OLD BRASS CURTAIN RINGS, if so discoloured as to be beyond cleaning, may be boiled in strong soda water, and afterwards enamelled white. They can then be used again as new.

OLD NEWSPAPERS can generally be disposed of to a paper merchant or a batcher.

In the house they are useful for wiping grease from the kitchen utensils prior to cleaning them, or for wiping lambs after filling them; the paper thus employed may be saved for fire lighting.

They are also valuable for wiping greasy knives upon, cleaning windows, and lighting the fires. Tacked together and put in a cotton case they make a warm bed covering.

WHITE PAPER should be put aside for lining cake tins, or for placing upon the scales when weighing provisions or draining foods upon after frying.

TISSUE FAMER may be employed for packing purposes, or for polishing mirrors.

BROWN PAPER should be neatly folded and put away for future parcels, or for lining shelves and cupboards.

STRING, when untied from parcels, should be neatly folded in separate pieces, and placed in a box for future use. It will be found useful in countless ways.

BROKEN LAMP CHIMNEYS AND TUMBLERS, if only slightly damaged, are sometimes placed over seedlings in the garden to protect them, while disused "negative" plates are ingeniously converted into small glass frames for gardening purposes.

TO ECONOMIZE COAL, carefully regulate the

dampers, so that more may not be used than is

necessary.

Sift and burn all cinders, and mix a fair quantity of coke with the coal, particularly in the kitchen range, where it will give a good heat without vitiating the air with noxious fumes.

Burn large and small coal together, and utilize

all rubbish to keep the fire going.

Buy coal when at low prices in the summer, and store enough for the whole year if accommodation will permit. Some coal merchants will give a contract for the yearly supply at a uniform charge throughout the year, delivery to be made when required by the householder

Coal which burns slowly is the most economical for general use, and if the flues of the stove are

kept clean there is less waste of fuel.

TO USE UP COAL DUST is always somewhat of a difficult problem. Mixed with ashes and damped, it may be used for filling in at the back of a fire which has burned red, a few large lumps of coal being placed in the front. Such a fire will keep in for several hours, and is particularly useful in the sick room where the fire must be going all night.

TO ECONOMIZE WOOD. Purchase it in as large quantities as possible, and thus save on the charge for cartage. Chop up and use all old boxes, branches of trees, etc., and utilize matchboxes and ignited matches for fire lighting.

Lay the fire so that it will readily kindle with

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ECONOMY in the house does not consist of going without requisites, but rather in avoiding superabundant luxury, and seeing that nothing is wasted. All furniture, clothing and household utensils should be treated with proper care by every member of the family, so that each article may serve its appointed purpose for a reasonable length of time. To keep everything in its place, in good repair, and to employ each article only for the use for which it is intended are some of the secrets of household economy, and ensure the best results from labour expended.

CHAPTER XXIX

PERSONAL SERVICE

CHOICE, CARE AND CLEANING OF WEARING APPAREL; HINTS ON PACKING FOR THE HOLIDAYS.

CLOTHING serves to compensate, to a great extent, for the natural loss of heat by the body, which it protects against heat, cold, wind and rain, thus assisting to maintain the body at its normal temperature of about 98.4° Fahrenheit.

The skin is the principal medium through which the body loses heat, which may escape either by:

- (a) evaporation in the form of perspiration,
- (b) radiation into space, or
- (c) conduction, when a cold object comes into contact with the skin, absorbing the heat given off by the body.

In a lesser degree, too, food and drink take much of the warmth which is generated, and a large proportion may be expelled by means of:

(a) the heated air from the lungs, which is re-

placed by cooler atmosphere from outside, and (b) the excretions of the body.

The transformation of heat into mechanical motion also tends to lower the temperature, until it is automatically restored. It will, then, be seen that clothing should be of non-conducting material, so that in hot climates the body may be protected against excessive heat, while in cold countries the rapid escape of heat from the body may be checked. No clothing is capable of promoting warmth by virtue of its own properties; a non-conducting material or a bad conductor will retain the heat imparted by the body, and may be termed warm material, while a good conductor of electricity and heat will allow it freely to escape, and will therefore be considered cool.

The chief materials used for clothing are wool, silk and fur from the animal world, and cotton or linen from the vegetable kingdom.

WOOL is one of the most important fibres used in the manufacture of cloth, flannel, cashmere, and other materials. Obtained principally from sheep of various kinds, it is a soft and elastic fibre partaking of the nature of hair, from which it differs in that it has a wavy, serrated surface. It is warm, soft and yielding to the touch, and its curl is a notable characteristic. It both absorbs and evaporates moisture very slowly; is but a poor conductor of heat, and the air spaces between the warp and the weft of the texture in woollen stuffs do not permit of the rapid ex-

pulsion of the warmth from the body. It forms an excellent material for the underwear of children and old people, for whom it is necessary to prevent the rapid cooling of the body, and if found irritating to a delicate skin, a thin gauze under-garment may be worn without impairing the good effects of the woollen stuff. Although capable of absorbing a large quantity of moisture, wool does not give rise to that sense of chill which is associated with linen and cotton underwear, when damp with perspiration.

SILK, the soft, smooth, glossy thread spun by the silkworm, is of great strength and elasticity. Being warm and light, and but a poor conductor of heat, it is very suitable for the manufacture of all kinds of clothing, although the price of silken fabrics is somewhat prohibitive in many cases. It will absorb moisture with great avidity but will throw it off as readily, and when not adulterated is very durable.

FUR, the hairy coating provided by Nature for various animals, particularly those in cold regions, has been used from time immemorial for human clothing, the skins being dressed with the hair still adhering to them.

COTTON AND LINEN textile fabrics, made from the fibres of the cotton and of the flax plants, are good conductors of heat, linen even more so than cotton. They are, therefore, less suitable for underclothing than woollen materials, and, unless very loosely woven, will not readily abwhen worn next the skin, and are more liable to cause chill. To delicate skins, however, they are less irritating than wool. When the wax-like outer coating of cotton is removed, it becomes very absorbent and is much valued for surgical purposes.

It may also undergo a special surface treatment, after which it is known as flannelette; this, however, is considered highly inflammable and dangerous for clothing unless by a further

process the fault is overcome.

Linen has a silky surface, is slippery and stiff to the touch heavy in weight, and less elastic than other fabrics. It is stronger than cotton, and, although more costly, will last for many years with reasonable care. Linen, the coolest of all materials, and cotton are suitable for hot weather garments, being lighter, more clean looking, and more easily washed than wool.

TIGHT CLOTHING should at all times be avoided. Not only is it injurious to the body, since it interferes seriously with the free circulation of the blood and with proper muscular action, but the lack of air spaces renders it less warm than loose clothing. Tight corsets are harmful to many important organs of the body, and garters worn instead of suspenders prevent free circulation in the blood vessels of the leg, often giving rise to varicose veins. Muscles whose free action is restricted will very soon become soft, weak and ultimately useless.

The choice of COLOURS of garments rests to a great extent with the individual, but it is well to bear in mind that white and light colours will radiate heat, while black and very dark shades will absorb it.

THE AMOUNT OF CLOTHING required depends largely upon:

- (a) health and age
- (b) season and climate, and
- (c) occupation.

Healthy persons, whose natural heat is great, and whose circulation is usually good, require less clothing than delicate people. In infancy and old age, too, the body requires more protection than at other times of life, it being less able to resist cold, the circulation of the blood being more feeble, and the heat-producing power limited.

In warm weather, of course, cooler clothing is needed than in the winter time, and those leading an active life require less protection from the elements than those whose occupation is sedentary.

REQUISITES OF CLOTHING. It should be warm though light in weight, heavy garments quickly tiring the body; the weight must be equally distributed, so as to be borne fairly by both hips and shoulders. All parts of the body must be properly protected, it being very unwise to muffle up one part, leaving others badly exposed to the cold.

CHOICE OF MATERIALS. Flannel may be of pure wool or a mixture of wool and cotton, the former, of course, being the best and most durable. Test woollen material for the presence of cotton by pulling out a thread and breaking it in the fingers, or unravelling a thread to see if the centre is of cotton. Woollen threads when burned will char, shrivel up without flame, and give off an odour similar to that of burned feathers. Pure woollen stuffs will be soft and springy to the touch, but if wool be mixed with cotton the stuff will appear harsh.

When Pinholes are found upon the selvedge at regular intervals the inference is that the material has been stretched in the making, and will shrink when washed.

To test the strength of woollen fabrics, hold a piece of the stuff tightly in both hands and press the tips of the thumbs together into it, afterwards examining both warp and weft to see if they stand the strain equally.

CALICO. Test it by rubbing a small piece for the presence of any dressing such as gum, clay or starch, which are frequently used for filling the spaces between the meshes in loosely-woven materials, adding to the good appearance and weight, but when washed out disclosing the inferior quality of the material.

The threads are flat and twisted, and should be fine, close, evenly woven and free from flaws, with an even selvedge. Cotton, being a vegetable fibre, will burn ræpidly and with a flame.

LINEN, like cotton, should be free from dressing and flaws, and should be evenly woven, with smooth threads, and cool to the touch. As linen fabrics are frequently adulterated with cotton, threads should be pulled out and tested by breaking. Linen fibres are strong and long with uneven ends when broken, while cotton threads will have shorter fibres, and the broken ends will have a furry appearance. Cloth made of half cotton and half linen is known as "union"; the difference between the two fibres may be easily detected with a microscope or magnifying glass.

SILK is often weighted in the manufacture with various substances, or adulterated with mercerized cotton or some other vegetable fibre with a silk-like appearance whose lustre will soon wear away. Woven silk will have long, straight, strong and lustrous fibres, which, if subjected to a burning test, will char slowly without flame. The microscope will also distinguish the silk and cotton fibres in the material which is adulterated.

STOCKINGS should be chosen of good quality, and of fast dye, which latter may be tested by rubbing. Double heels and toes are necessary, and in the case of children's stockings, double knees also. Always obtain stockings which fit well; if too short in the foot holes will soon become visible, and if too large, blistered heels and corns may be the result of the creases formed in the material. Frequent changing of

stockings, and careful mending after washing, are advisable; observation of these rules will ensure greater comfort, and longer life to the stockings.

Hand-knitted stockings are considered to wear better than machine-made ones, and being rough they tend to promote good circulation and so keep the feet warm.

CHOICE OF CLOTHING. Choose garments which are suitable to the occupation, occasion, time of year, and place, studying neatness in every detail, and selecting colours which tone or contrast well, and are becoming to the wearer.

Take care that the whole outline of the figure is pleasing and that the hats, costumes, boots and accessories are of good design, go well together and are suitable for the occasion upon which they are worn.

Choose good materials, and avoid over-trimming; select patterns which are suitable to the wearer, rather than slavishly following the prevailing fashion, or other people's taste. Avoid eccentric and conspicuous styles of dress, but do not minimize natural attractiveness by becoming "dowdy."

Very bright or pronounced colours for coats and skirts are not practical unless constant change can be made.

The well-dressed person is not necessarily the one who has the most extensive and extravagant wardrobe, but rather the one who has the gift of selecting, and properly adjusting and

wearing appropriate garments at all times and in all places.

CARE OF CLOTHES. A reasonable amount of attention paid to the cleaning, brushing, storing and reparation of garments will not only prolong their life, but will ensure that well-groomed appearance which should surely be the aim of all civilized people.

Such small matters as replacing hooks, buttons, fastenings or loops for hanging occupy but little time, although if neglected they lead to damage which will require many hours to repair. The careful airing, brushing and hanging up or putting away of clothes, too, will not only protect them from dust and dirt, but will obviate the necessity of renewing too often, which is a matter of some consideration where the purse is not very deep. Clothes should never be thrown together in a heap, but coats and skirts, gowns and other such articles should be placed upon hangers which, if suspended from a pole or rod fixed into the wardrobe, will be found to economize space, and prevent the articles from being hung one on top of the other. Blouses, underclothes, and small things should be neatly folded, and each kept in its appointed place. Careful pressing at intervals will also help to keep clothes in good order, but it must be recollected that cloth garments must not be ironed on the right side, or unsightly marks may be produced. Iron on the wrong side or cover with a thin cloth. Boots and shoes when not in use should be put

upon shoe-trees, which will help them to retain their shape.

UNDERLINEN. Keep a good supply, and if possible have it hand made, which, although costing more than machine-made garments, will last much longer. Indian longcloth is a suitable material for strong underclothes, while fine cambric is good for lighter wear. Trimmings should be of good quality, with a strong edging, not liable to tear out in the wash.

Underclothing of every description should be shaken and hung up to air when removed at night, and will need to be frequently changed. Day underwear should never be worn at night.

Linen or hand-made buttons will be found the most suitable for underclothing, as they will not cause holes in the material when washed, and will not become iron moulded.

Before putting aside clean linen, see that it is neatly folded. Endeavour to give an equal amount of wear to each garment, so that parts of sets will not have to be discarded before the rest.

CLOTH CLOTHES should be brushed immediately they are taken off, or if that is impossible, at least before they are put away. If much splashed withmud, the spotsmay be sponged lightly, then dried and brushed, ammonia or benzine being resorted to if the stains are obstinate. Use a clean clothes brush and sponge. If there is no wardrobe available in which to hang coats and skirts, a curtain will protect them from dust,

or they may be folded and put into a drawer. Two skirts should not be put upon the same hanger nor should skirts be turned inside out; both these practices will tend to crease them.

Repairs should be undertaken as soon as any

damage occurs.

WHITE SERGE will be preserved clean for some length of time if rubbed occasionally with a cloth ball, left for several hours, and then well brushed with a clean brush and shaken.

SILK DRESSES AND BLOUSES. After use, spread them out and carefully wipe them with a dry soft cloth, and put them away carefully with tissue paper between the folds to prevent creases.

MUSLIN AND PRINT DRESSES should be laid in a drawer or neatly folded into a dressbox; if hung up they will become limp.

WINTER GARMENTS. When warm clothing is no longer required, it should be well brushed, shaken, aired out of doors if possible, and have the stains removed, before it is folded and put aside with moth preventative. Pitch pine paper or camphor are two of the best known moth preventatives, but common newspaper covered well all over the garments, so that there are no crevices through which the moths may enter, is an excellent packing material for woollen goods. Fold the garments with the seams as far as possible, and stuff the sleeves and creased parts with soft paper.

SUMMER GARMENTS. Before storing these, have them washed but not starched, which would be likely to cause them to rot. Fold neatly, and pack with soft tissue paper, using blue paper for white things to preserve their good colour.

HATS. After each time of using, and before being put away in a covered hat-box or drawer, hats should be dusted with a soft light brush, or the dust may be blown away, a small pair of bellows being an excellent utensil for the purpose.

Never crush one hat over another when putting them away in boxes, and keep them covered with tissue paper.

SILK LININGS to skirts become quickly soiled at the edge, and wiping them from time to time with a cloth well wrung out of warm water and vinegar, will be found a good plan.

CREASED GARMENTS. Creases caused by packing may be removed by placing the clothes on a line in the bath-room, filling the bath with boiling water, and leaving the clothes in the steam for two hours, with the windows and door of the room kept shut. Airing in front of fire will then complete the work; the pile of velvet so treated will be found to be restored if it has been crushed.

WET FURS. As heat will destroy the gloss of furs and render them brittle, they should never be put near the fire to dry; wipe them, if wet, with a soft cloth, proceeding in the direction in

which the fur lies upon the skin, and afterwards hang them in a current of air.

TO CLEAN FURS. Rub them with bran which has been heated in the oven, using the hand for the process. Shake the bran well out and then rub the fur with fig dust until quite clean, after which shake them well to get rid of the fig dust. (Fig dust may be bought at a cornchandler's or oil shop.)

TO STORE FURS. Overhaul, mend, shake and beat with cane before putting furs away for any length of time. Unless they can be sent to a furrier's for cold storage, they should be put into bags of pine tar (tarine) which may be bought in various sizes, and stored in a cool place.

During the summer months, take them out occasionally and inspect them for traces of moth or mould, shake and air them in a shady place out of doors, avoiding the hot sun, which is

detrimental to any kind of fur.

When possible it is better to send furs away for cold storage, where they will be constantly under the care of an experienced furrier, secure against the inroads of the dreaded moth, where any eggs and larvæ will be destroyed, and where they will be kept under the most sanitary conditions. They will also be insured against fire and burglary.

BUYING FURS. Choose them with a due regard to their suitability, and wearing qualities, at the same time taking the price into consideration. .

With rare and fashionable furs the demand is usually greater than the supply, so that many counterfeits are offered for sale, some of the imitations being so clever that even experienced people are deceived. Marmot is frequently sold as mink, the stripes being painted upon the surface; therefore, in selecting mink, part the hairs to see if the stripes are visible right through to the skin.

In seal skin, the colour is lighter underneath the surface, but imitations will be of unform shade throughout.

Examine skins to see if they are soft and pliable, as they should be when properly dressed.

Dyed black furs may be detected by breathing upon them, and rubbing with a small piece of white material; where the colour soils the white stuff, caution should be exercised in buying the furs. Russian pony, squirrel and fox are durable furs; Siberian sable is perhaps the most prized and is very costly; while ermine has always been the fur of Royalty, it being at one time the exclusive prerogative of sovereigns to wear it, although nowadays it is in very common use.

MEN'S CLOTHES. Wrinkles are more often caused by carelessness than by ignorance of the proper method of folding clothes. Little time is occupied in folding a pair of trousers lengthways and throwing them over the back of a chair, or in folding a soat with the sleeves inside.

Empty all pockets of garments not in use. Buy good material so that the clothes may look well, and keep in good shape until worn out; if possible have several changes of suits, so that one may not be in continual use, and before lounging be careful to change the coat for a loose comfortable one.

FOLDING A COAT. Spread it flat on a table, lining downwards; turn up the collar, pull the sleeves out straight and flatten them; fold over the two sides of the coat so that the sleeves are just covered; fold the back left tail of the coat having the crease just below the buttons; proceed in the same way with the right tail, and then fold the coat in half.

Sack coats, without tails, are folded in the same way in every other respect.

TROUSERS. Hold at the waist and fold by bringing together the first brace button on either side; this will give the straight line of the crease from the waist downwards. Double them over and put into a press, or in clean paper under a mattress. Never hang trousers up by the buckle at the back; it will spoil the shape and cause bagginess.

HANGING COATS by the band at the neck is a bad habit, particularly in the ase of a heavy overcoat. Hangers placed in the shoulders will retain their shape, and prevent straining the back of the coat. Waistcoats may be hung

upon the same hangers, or put folded into a drawer.

CLEANING MEN'S CLOTHES. Thorough brushing with a whisk brush and shaking frequently is necessary to free them from dust. Remove stains with a sponge dipped in warm water, using ammonia for grease. If the stains are too bad for home remedies, do not use alcohol, as it hardens the cloth, but send the clothes to a professional cleaner.

MEN'S HATS. Never let a felt hat rest flat upon the brim, but allow it to remain sideways on the brim, or hang it up. Silk hats may rest on the top of the crown, or be hung up. To brush them use a soft brush and afterwards a silk pad, being careful not to brush against the nap of the material. Silk hats do not need ironing more than once a month as a rule; too much attention is injurious.

Opera hats should be kept unfolded in a place away from dust.

Uniforms and clothes decorated with gold and silver braid should have the metal parts wrapped in well-aired tissue paper, or, better still, in specially prepared jeweller's paper, which will prevent them from tarnishing. Keep them in an air-tight case, preferably tin, but do not use camphor or other strong moth preventative, which is fatal to the polish upon the metal. When in use, gold and silver trimmings may be kept bright by rubbing with a piece of clean chamois leather.

GLOVES. Never put on gloves in a hurry; they will wear longer and fit better if donned slowly.

Turn them down below the opening and gently work the fingers on before inserting the thumb, and never force them into place by pushing the other hand between the fingers.

In removing gloves from the hand, peel them off the wrist inside out, which will have the effect of helping them to keep a good shape. When removed they should be turned right side out, and folded flat, not rolled into a ball.

TO WASH CHAMOIS GLOVES. Follow out the rules given in a previous chapter for chamois leathers.

TO CLEAN KID GLOVES. Put them upon the hand and gently rub with a sponge dipped in petrol or gasoline; hang them in the open air to dry, and remember not to put them near a fire or naked light while using the petrol or gasoline, which are highly inflammable.

TO CLEAN LIGHT COLOURED KID GLOVES. Put them on the hand and sprinkle with powdered French chalk, rubbing the hands as if washing them.

Remove the gloves, but do not shake the chalk out; leave them for a night on a clean cloth as they are.

In the morning put them on again and clap them together, wiping them with a soft clean cloth. GLOVE TREES may be purchased very cheaply

and are useful for cleaning purposes.

Never allow gloves to become too soiled before cleaning, or it may be impossible to remove the stains. Should it not be convenient to clean them at home, any dry cleaner will undertake the work at a small charge.

TO PACK GLOVES for a sea voyage fold them in tissue paper and put into a dry clean pickle bottle with a spring top to it. This will prevent their getting spotty and damp.

VEILS should be rolled up when not in use, and ironed from time to time.

MACKINTOSH COATS should be of a well-ventilated pattern, and when wet should be shaken and hung up so that the air may reach all parts. Never subject them to the heat of the fire, or the seams will become separated. Mud stains may be removed by brushing and by wiping with a sponge dipped in warm water.

TO CLEAN WHITE MACKINTOSHES. Boil 3 oz. of Castile soap in six tablespoonfuls of water, but do not lather; allow it to cool and then add $\frac{1}{2}$ oz. of calcium magnesia.

Roll it into a ball and allow it to set.

Spread the coat on a table and brush with a nail brush and tepid water, using the prepared soap, and brushing only in a downward direction. Rinse with tepid water, dry with a cloth and hang in a current of fresh air.

TO WATERPROOF MATERIAL. Boil ½ oz. of Russian isinglass in one pint of water until dissolved.

Dissolve ½ oz. of Castile soap in one pint of hot water.

Dissolve I oz. of alum in two pints of warm water.

Strain all the solutions into one basin and brush the wrong side of the cloth with the mixture. Allow it to dry and then brush over with cold water.

UMBRELLAS. Never allow an umbrella to remain open to dry, as the moisture will cause the ribs to bend and they will not shut again closely after being warped in this way.

Turn the handle downwards to allow the water to run out from the bottom of the ribs, or the silk will rot.

Umbrellas when not in use for some time are better kept unrolled; if rolled up the seams may split.

SUNSHADES when dirty may often be washed, unless of very elaborate design, or delicate make, when they are best sent to the professional cleaner.

TO WASH SUNSHADES open them out of doors and scrub with warm soapy water; pour plenty of warm water over the sunshade to remove all traces of soap, then rinse in cold water. Dry the ribs and leave the sunshade

partly closed hanging from a line. Polish the handle with a soft duster.

TO CLEAN FEATHER BOAS. Grey or white feathers may be cleaned successfully at home,

providing they are not too dirty.

Mix two tablespoonfuls of flour heated in the oven (but not allowed to brown) with four tablespoonfuls of calcium magnesia. Rub this gently but thoroughly into the feathers, and shake well to remove the cleaning agent.

TO WASH COQUE'S FEATHER BOAS. Wash them in warm soapy water, rinsing them first in warm and then in cold water.

Squeeze as dry as possible, shake and hang out in the open air to dry, shaking them frequently while the drying proceeds.

BLACK HATS (Chip, Mohair, Tagel) may be cleaned in the following way:

Make some strong tea and strain it into a basin; brush all the dust from the hat, and apply the tea with a soft nail brush. Leave the hat to dry. If stiffening is required, a teaspoonful of gum may be added to the tea and well mixed before using.

TO CLEAN WHITE STRAW. Dissolve one teaspoonful of oxalic acid in half a pint of boiling water, and scrub the hat with it after having well brushed the dust away; rinse with cold water and dry in the open air. There are other prepar-

ations to be bought at a chemist's; directions for use will be found on the packet.

TO CLEAN WHITE FELT HATS. Mix powdered magnesia with water into a thick cream; brush the hat and apply the mixture with a nailbrush. Allow it to dry and then brush it off, repeating the process if the hat is not then clean.

TO CLEAN MOTHER-OF-PEARL BUCKLES. Make a paste of whiting and water; cover the article with it, rubbing whilst applying. When dry, brush off the paste and polish the buckle with a leather.

TO CLEAN JET ORNAMENTS. To remove dust from the interstices, and restore the jet to its original lustre, put the articles into a basin and pour over them equal quantities of vinegar and water. Leave them for twenty minutes; remove and place upon a clean cloth to dry.

STAINS ON CLOTHES

GREASY COAT COLLARS may be gently rubbed with a sponge dipped in warm water to which has been added a little ammonia.

GREASE SPOTS may generally be removed with a hot iron over blotting paper, the paper being changed as it becomes greasy. If this be insufficient, place the part over a pad formed of several thicknesses of white cleth or blotting

paper, and rub with a sponge dipped in benzine or petrol.

MILK SPOTS OR MACHINE OIL can usually be taken out with cold water and pure curd soap, but if obstinate a little French chalk, or powdered magnesia rubbed in and left for a while will generally cause the mark to disappear.

TAR will yield to butter, and the part can then be washed with warm soapy water, any remaining mark being removed with petrol or benzine.

WET PAINT. Rub quickly with a flannel dipped in turpentine or paraffin.

DRY PAINT. Apply turpentine and alcohol mixed in equal parts, any grease stain being afterwards removed with benzine. Work from the outside of the stain to the centre, to prevent its spreading and leaving a rim at the edge.

INK STAINS. Sour milk will often remove ink, the part afterwards being washed with warm water and soap. Old stains of ink on white goods may be treated with salts of lemon and boiling water.

IRON MOULD AND RUST MARK on white goods will usually disappear under the salts of lemon treatment, or the juice of an ordinary lemon may be rubbed in and the garment left in the sunshine to get rid of the stain.

MILDEW may be removed with a mixture of soft soap, starch and the juice of a lemon, spread over the part and left to bleach it before washing in the ordinary way.

MEDICINE STAINS will generally yield to ammonia or a coating of Fuller's earth.

BLOOD STAINS when fresh will disappear if sponged with lukewarm water and ammonia. When old, it is usually necessary to resort to chemical cleaning.

COFFEE AND TEA STAINS are generally removable by washing the part in warm water, soaking it in water and soda, and then washing the soda out with warm water. Glycerine will also remove tea stains.

FRUIT STAINS on white fabrics will often yield to boiling water poured upon them, after a little powdered borax has been rubbed into the stain.

PACKING. More reliable than a mental note of what is to be packed in the various trunks and boxes to be taken away for the holidays, is a detailed list in a small but convenient notebook. A week or so before departure put down in the book all that is indispensable, and look over everything to make sure that all fastenings and tapes are in good order, and all articles properly repaired.

Do not forget to take with other necessaries a small box containing needles, pins, hooks and eyes, tapes, buttons, etc. Air all the trunks thoroughly on a sunny day, and when packing them place them across two chair seats, which will be found an easier position than kneeling or stooping to the floor level. Linen folded flat and packed at the bottom makes a good layer, which may be followed by the heavy dresses (non-crushable), which must be folded in straight lines from the waist to hem and doubled only once, with tissue paper between the folds.

Keep all corners tightly packed with small things, to prevent the contents of the trunk from moving about and so becoming creased. Breakable objects, such as mirrors and bottles, must be wrapped carefully in soft paper and laid among the folds of the clothes away from the sides of the trunk. Bottles should have their corks and stoppers well tied down with a piece of glove leather. Boots must be rolled in paper or put into bags and stowed at the bottom of the box.

Unless there is a special box for hats, they should be pinned securely to the tray of the trunk and their bows, etc., should be stuffed with soft packing paper.

Children's favourite toys should not be left behind, and it is well to provide a separate box for them if possible.

A good clothes brush and luggage labels should find a place among the essential odds and ends.

Luggage should be distinctly labelled and addressed, and may be sent "in advance," in which case it is well to provide against possible delay by taking a handbag with requisites for a night.

The more tightly goods are packed the better they will travel; it is therefore advisable to completely fill trunks, leaving nothing loose in them. All crushable articles, such as blouses, light frocks and laces, may be put into boxes, which can be packed as closely as necessary in the trunk.

PETROL. This agent having been several times mentioned for cleaning purposes it is not out of place to emphasize here the great care which is needed in using it.

Being very highly inflammable, petrol should not be used near a naked light or fire; indeed, the room in which the cleaning is being done should not be adjoining one in which there is a light or fire. The vapour given off by petrol, although volatile, is heavier than the atmosphere and will sink, so that a window opened at the top will not carry it away. It is necessary to have a floor draught which will create a current and disperse the fumes. It is better to use petrol out of doors, and to dispose of the dirty spirit by pouring it into a hole in the ground; it should never be put into the drains.

CHAPTER XXX

THE MEDICINE CUPBOARD

HOME REMEDIES; SIMPLE TOILET NOTES

HEALTH, being one of the first essentials to life's success in either business or pleasure, it is highly important that the women of the household should be informed as to the construction and uses of the various parts of the body; they should possess a knowledge of the proper treatment of common ailments, should understand the ordinary rules of home nursing, and should be sufficiently acquainted with the principles of first aid to be able to render practical and intelligent assistance in times of emergency.

Many a long illness and heavy doctor's bill has been saved by a judicious use of well-known remedies, and serious consequences of accident have been averted by presence of mind and knowledge "of what to do until the doctor comes."

No household should be without its medicine

cupboard, containing at least the most common emergency appliances for use at times of accident or sudden attacks of cold and other ills.

It should be fixed in a bedroom or some other convenient place not too near a fire or hot pipes, it must be kept clean and airtight, and should be kept locked, the key being in charge of the mistress of the house. All bottles should be clearly labelled, poisons being particularly emphasized by special labels and peculiar bottles not likely to be mistaken for anything else. Poisons and non-poisons should be kept carefully apart.

Among the contents of the medicine cupboard should be included:

 $\frac{1}{2}$ lb. of absorbent cotton wool.

 $\frac{1}{2}$ lb. of boric lint for dressings.

A roll of diachylon or adhesive plaster.

A few roller bandages, assorted wide and narrow.

A couple of pieces of tape.

A pair of scissors, kept only for surgical work.

A knife, kept only for surgical work.

A packet of assorted needles.

A packet each of safety and plain pins.

A reel of thread.

A graduated glass measure.

Carbolic soap.

Clinical thermometer.

A feeding cup and two glass spoons.

I or 2 yards of flannel (white) for fomentations.

I yard of muslin for poultices, etc.

A packet of Thermogen for sore throats, colds on the chest, etc.

A bottle of disinfectant.

A small quantity of brandy, sal volatile, glycerine, olive oil, boric acid powder, tincture of Eucalyptus, castor oil, vaseline, ipecacuanha wine, and camphorated oil.

A bottle of embrocation, invaluable for strains, sprains, and rheumatic pains, as well as for many

other purposes?

•A piece of oil silk for dressings, and for covering fomentations.

A tin of linseed meal for poultices.

EMERGENCY TREATMENT

FOR BROKEN LIMBS. Unless the rules of First Aid are properly understood, it is best not to interfere with the injured part before the doctor arrives, but to simply lay the patient down in as comfortable a position as possible, with the injured part supported from underneath to prevent further damage. Keep the patient warm, and do not administer alcoholic stimulants, but if necessary give a little strong tea, coffee, milk, or a little sal volatile. Smelling salts, too, will be found useful.

FOR SPRAINS AND DISLOCATIONS lay the patient down comfortably, support the injured part with a soft pillow, and apply a cold water dressing; if there is much pain and cold water cannot be borne apply very hot water, but do

not attempt to reduce a dislocation; this should be left for the doctor to attend to.

FOR STRAINS. Put the patient in a comfortable position, supporting the injured part, and apply hot fomentations if the pain is severe, and bandage firmly.

FOR SEVERE CUTS. Stop the bleeding at once by pressure with the hands or with a pad and bandage. The pad may be applied to the wound itself or to the pressure point nearest to it. If not certain as to whether the bleeding is from an artery or vein, bandage both above and below the wound, until a doctor can see it. A pad may be formed by turning in the corners of a handkerchief to the centre, repeating until a hard lump with a smooth surface on one side is produced; the smooth side goes next to the wound.

FOR SMALL CUTS. Wash thoroughly to prevent blood poisoning, stop the bleeding by putting a pad on and binding it up with a bandage.

FOR NOSE BLEEDING. Keep the patient sitting up and apply something cold (ice or a sponge wrung out of cold water) to the face over the nose, and at the back of the neck, and put the feet into hot water if the bleeding is very bad.

FOR BRUISES. Apply ice or cold water. A

little hazeline is soothing, or bathe with equal quantities of cold water and methylated spirit.

LOTION FOR BURNS. Olive oil and an equal quantity of boracic lotion (half pint boiling water and one teaspoonful of boracic powder). Mix the two together and keep in a bottle. Apply to the injured part and cover with lint.

This is considered better than carron oil for keeping, as the latter becomes rancid if kept too long.

CARRON OIL is a mixture of linseed oil and limewater.

FOR BURNS AND SCALDS. Remove the clothing at once, taking care not to break any bhisters (but if stuck to the wound it must not be removed till the doctor arrives), and cover up with oil, vaseline, cold cream or Pond's Extract; dress with linen or lint dipped in oil, with a clean bandage on the outside.

WHEN CLOTHING CATCHES FIRE smother the flames with a rug, blanket, table cover, wet clothes or anything at hand, and roll the victim on the floor; then treat the burns with oil. On no account allow one who has caught fire to run out of doors.

FOR AN ACCIDENT WITH PARAFFIN LAMPS OR BURNING OIL smother the flame

with heavy rugs or throw sand and ashes over the place, but do not use water to put it out.

FOR INSECT STINGS: Extract the sting, if left in, with a watch key or tweezers, and apply ammonia and water, or a paste of bicarbonate of soda with sal volatile.

Common soda or the blue bag will also relieve the pain.

MOTES IN THE EYE. Do not allow the eye to be rubbed, but pull down the lid and remove the object, if it can be seen, with a clean camel's hair brush dipped in cold water, or with the corner of a handkerchief. If nothing can be seen, a drop of pure olive oil will sometimes dislodge the foreign body.

FOR CONCUSSION or unconsciousness from a bad fall or blow, undo all tight clothing, lay the patient in a comfortable position on the back, but do not raise the head, so that he can breathe easily, give plenty of air, keep the body warm, and send for the doctor.

FOR HYSTERICAL FITS. Speak sharply to the patient, and avoid giving sympathy; dash cold water in the face if the fit continues. Firmness is very necessary with the patient.

FOR FAINTING. Loosen tight clothing, and lay the patient down with the head lower than the feet. Give plenty of air and administer sal

volatile and water when the patient can swallow, bathe hands and face with cold water. Smelling salts are useful in cases of fainting from heat.

FOR CONVULSIONS IN CHILDREN. Take off the clothing, and place a cork tied to a string between the teeth (if any); place the patient in a warm bath, the temperature of the water being a little above 98°, reaching to the middle of the child's body, and sponge the head with cold water.

FOR CHOKING. Remove the cause as quickly as possible, and give plenty of fresh air. Open the mouth and put the forefinger right to the back of the throat to dislodge the cause of choking; or bend the body forward and thump the back hard. If the child is sick, the foreign body will often be removed in that way.

FOR' POISONING. In most cases where the mouth is not stained or burned by the poison, an emetic should be given at once; a tablespoonful of mustard in a tumbler of warm water, two tablespoonfuls of common salt in a teacupful of warm water, or tickling the back of the throat will make the patient sick.

Where the poison is an acid there will be stains on the mouth and lips; give a dose of lime, chalk, whiting or wall-plaster and water, and wash the mouth with the mixture.

For poisoning by an alkali such as ammonia or caustic soda give the patient an acid dose, lemon juice or vinegar and water.

Where the patient is not unconscious, after treatment, give milk, raw egg, or olive oil. Barley water and tea are also good. When the patient is sleepy and drowsy after taking poison, keep him awake at all costs, by giving strong coffee without milk to drink, and walking him about.

FOR SUFFOCATION FROM GAS FUMES. Send at once for the doctor. Turn off the gas at the meter, and tie lightly over the mouth a handkerchief moistened with water and vinegar, or plain water, A rush should be made to the window, which should be forced open, thus creating a draught. Remove the patient to another room, unfasten the tight clothing; apply friction and warmth to the body and artificial respiration if necessary.

FOR COLDS ON THE CHEST. Rub with embrocation, or camphorated oil, on the throat and chest, afterwards covering them with flannel or Thermogen. Give a cough mixture to relieve the cough. A linseed poultice will become necessary for a case of bronchitis, croup, pneumonia or pleurisy.

CAMPHORATED OIL. Shred I oz. of camphor into half pint of olive oil, and stand it in a jar of hot water until dissolved. Keep it in a bottle well corked.

EMBROCATION for rheumatism, sprains, etc.

Beat up two raw eggs and add them to half pint of vinegar, half pint turpentine and r oz. cayenne pepper essence. Keep in a corked bottle and shake from time to time. The mixture is ready for use a few hours after making, and should be well rubbed in to the affected parts.

COUGH MIXTURE.

5 oz. treacle.

6 oz. honey,

18° tablespoonfuls of vinegar.

1½ teaspoonfuls ipecacuanha wine.

Put the vinegar, treacle and honey into a jar, and stand it in a saucepan of boiling water; stir until dissolved. Add the wine and bottle the mixture, keeping it well corked.

Dose: One dessertspoonful every three or four

hours.

TOFFEE FOR COUGHS.

1 lb. Demerara sugar.

I oz. butter,

2 oz. treacle.

I teaspoonful ipecacuanha wine.

Boil the butter, sugar and treacle together for 20 minutes and add the wine.

Pour out into a greased tin and when cold break into pieces and keep in a tin for use.

Give a small piece to be sucked slowly, from time to time when the cough is troublesome, but never allow a child to go to bed with a piece in its mouth for fear of choking.

LINSEED POULTICES should be changed very frequently, indeed, as soon as one is cold a fresh one should be applied.

TO MAKE A POULTICE. Scald a basin with boiling water, and put into it sufficient boiling water to make the poultice; with the left hand sift through the fingers the crushed linseed meal, stirring quickly with a knife or wooden spoon until the mixture cuts clean and is free from stickiness. Spread it thickly, from a quarter to half an inch on cotton wool, flannel or a piece of blanket, and apply at once. A few drops of oil or vaseline may be smeared over the surface to prevent it sticking to the skin. The poultice, to be of any use, must be really hot when applied.

FOR CHILBLAINS. Ointment for broken chilblains may be prepared as follows:

2 oz. benzoated lard.

 $\frac{1}{2}$ oz. oxide of zinc.

ī drachm carbolic acid crystals.'

5 drachms almond oil.

Dissolve the crystals in the oil, standing the jar in hot water; add the lard, and when melted stir in the zinc powder. Stir till the mixture begins to set, then put into jars. Apply with lint every night and morning until relief is obtained.

TINCTURE OF IODINE may be painted on unbroken chilblains night and morning.

LANOLINE may be applied to scratches and bruises, with a gentle friction.

IPECACUANHA WINE is invaluable for cases of croup, its effect being to remove the phlegm by causing vomiting. When it becomes cloudy it is of no more use, and should be thrown away.

MUSTARD LEAVES are used as a counterirritant in cases of chest trouble and internal inflammation; full particulars for applying the leaves are printed on the packets in which they are purchased. •

BORIC ACID POWDER is very useful as a dressing for dusting cuts, wounds and sores. It should be keptoin a tin, and the lid pierced with small holes to facilitate the application.

THE TOILET

It should surely be the aim of all self-respecting persons to make the most of the good points bestowed upon them by Nature.

Every one's appearance is improved by a little care and trouble with the toilet, and health being the greatest beautifier, a strict observance of the laws of cleanliness, with a view to preserving the body in a fit and perfect condition, cannot be regarded as vanity, but rather as common sense, and the payment of a just debt to the community at large.

Towards this end, it is unnecessary to provide an over-abundance of toilet requisites; these need to be few in number but good in quality.

THE SKIN. A good complexion has always been considered a mark of beauty, and nothing will promote its clearness more than the habit of cleanliness. The daily bath, then, in a wellventilated room, followed by a brisk towelling, is one of the first essentials of the toilet. A cold plunge is invigorating for those whose natural robustness will permit of it, but as a general rule water of about the normal heat of the body is advisable. Soft water should be used if obtainable, but a small amount of ammonia. borax or fine oatmeal, tied into a bag of muslin, will soften the water. Always use a pure toilet soap, but do not overload the skin with it and carefully rinse off all traces of it A reasonable amount of exercise out of doors and healthy diet are also beneficial to the complexion.

TO PREVENT ROUGH AND SMARTING SKIN, due to exposure to the wind or hot sun, a pure cold cream, or some similar complexion cream, may be applied after washing.

THE HANDS, whose care should be one of the chief toilet considerations, should be carefully manicured at home at least once a week. They should never be allowed to become excessively dirty, gloves being worn while performing housework.

A USEFUL LOTION FOR THE HANDS, which may be kept in the bathroom or upon the washstand, is made with equal parts of glycerine

and rubra lotion (tincture of lavender and zinc). Mix the two together in a bottle and rub a few drops into the hands after washing, but before drying them upon the towol.

ANOTHER SIMILAR LOTION is made by mixing equal quantities of glycerine, rose water and hazeline.

Rub in a few drops after washing when the hands are partly dried.

FOR CHAPPED HANDS prepare:

I oz. white wax.

1 oz. spermačetti.

2 oz. almond oil.

³ oz. powdered camphor.

Melt all except the camphor together in a jar standing in a saucepan of boiling water, and when dissolved beat the powdered camphor into the mixture and put in small jars for use upon the hands night and morning.

BREATHING EXERCISES for ten minutes in the morning out of doors or before an open window, with the body free from tight clothing, will have a wonderfully beneficial effect upon the general health, particularly in the case of anæmic persons. Draw in the air through the nose until the lungs are comfortably full; hold the breath for a few seconds, and then expel through the mouth. Allow a few moments' pause and repeat the process, avoiding too much at one time.

THE TEETH. Good teeth are absolutely essential to good health, and the best way of preserving them is by keeping them perfectly clean. Brushing at least twice a day, or better still after each meal, is necessary, the brush having short, closely set bristles, not too stiff.

Use tepid water rather than cold, and with a length of dental floss, or white silk, remove any particles between the teeth which the brush will not reach. Carbolic powder or some dentifrice of good quality should be put upon the brush and will act both as a cleanser and preservative to the teeth.

A MOUTH WASH prepared from 1½ oz. bicarbonate of soda dissolved in one pint of boiling water, may be used as a gargle as well as a wash, and will clean the gums and tongue, while preserving the teeth. Keep it well bottled.

Pure eau-de-Cologne diluted with a little water also forms an excellent mouth wash, and sweetens the breath.

THE HAIR. A good brushing daily with a firm brush, using long even strokes, is essential to the well-being of the hair. To brighten it after the brushing a silk handkerchief may be rubbed over it, and where the natural oil is deficient, a very little pure olive oil rubbed into the roots occasionally will greatly enhance its beauty, and promote the growth.

Since air and sunshine are as necessary to the hair as any other part of the body, it is well to

give it a sunbath at intervals, by sitting in the sunshine with the hair hanging loosely about the shoulders.

The hair should be kept clean by shampooing once a month; only a reliable shampoo powder should be used; inferior agents and soaps containing soda should be avoided. Soda, although having the effect of making the hair fluffy, will render it brittle; borax, on the other hand, will give the good result without the bad. It is a mistake to tightly plait the hair at night after wearing it dressed all day; it should be either very loosely plaited or left to hang freely. When the body is tired and the skin of the head relaxed, it is not advisable to do too much

head relaxed, it is not advisable to do too much brushing of the hair; the better plan is to shake the dust out and leave it until rest has been obtained. Hair which is split at the ends will not grow; when this fault is noticeable get it singed.

Brushes, combs and other accessories must be kept perfectly clean, and rough hairpins must be avoided.

SHAMPOO SOAP. Mix $\frac{1}{2}$ lb. green soft soap, $\frac{1}{2}$ oz. salts of tartar and $\frac{1}{2}$ pint water in a jar, standing in a saucepan of hot water. When quite dissolved put into jars and use sufficient to form a lather for washing the hair.

THE EYES. To keep the eyes clear and bright, do not overstrain them, and never work in a bad light. Avoid patent lotions, etc., for enhancing the beauty of the eyes, but if they are tired a

little boric acid powder dissolved in boiling water will be found a great relief, or diluted cold tea is both harmless and beneficial to weak eyes.

THE FEET. Keeping the feet scrupulously clean and comfortable goes a long way towards the general good health of the individual. Immersion in warm water to which is added a little sea-salt will relieve tired or sore feet, and if the shoes and stockings fit well, being neither too tight nor too loose, many evils such as corns, bunions, and blisters may frequently be averted. The nails should be as carefully kept as those of the fingers, and rough or hardened skin may be removed with a piece of pumice stone.

PERFUMES. Use only a very good perfume and sparingly. An over-abundance of strong-smelling perfume is both unpleasant and vulgar. Perfume, if used, should be subtle and elusive.

CHAPTER XXXI THRIFT

HOUSEHOLD ACCOUNTS; CASH v. CREDIT; INVESTMENTS; BANKING

THRIFT is the excellent quality of economizing without being mean. The thrifty housewife will show this capacity in the careful expenditure of money and time; by allowing no waste in the house, and by using everything to the very best advantage. She will learn the uses and abuses of everything within the domestic sphere, so that she may be able to exact full and fair value in all directions. She will be careful to buy in the best market, and will take advantage of prices when food and clothing are cheap. While economizing wherever possible, she will not hesitate to spend money when the health or comfort of the family demand it.

The practice of thrift entails:

Doing without unnecessary luxuries; standing firm against the temptation to fritter money away needlessly; studying how best to use both time and money; and not allowing pride to hinder a due attention to even the most homely details of household work. The housewife should gain practical experience in every department of household work, ignorance being frequently the cause of extravagance, as well as of unhappiness and discemfort.

Smiles says: "There is a dignity in every attempt to economize, its very practice is improving, it indicates self-denial and imparts strength to the character, it produces a well-regulated mind, it fosters temperance, it is based on forethought, it makes prudence the dominating characteristic, it gives virtue the mastery over self-indulgence, above all, it secures comfort, drives away care and dispels many vexations and anxieties, which may otherwise prey upon us."

HOUSEHOLD ACCOUNTS. These relate to all the necessary expenses connected with the household. It is impossible to draw up any hard and fast rule for the division of income into household and other expenses; each case must be considered individually, according to the requirements of the family, number in the family, and locality of the home. When a housekeeper finds that a certain proportion of the income is sufficient for the house expenses, she should keep rigidly within that allowance, making careful plans for the spending of it to the utmost advantage.

This gift of well managing an allowance brings with it to a certain extent control of circumstances, which happy state is unknown to the careless person who suddenly finds, when half-way through the month, that the allowance is exhausted and who cannot conceive how it has been spent.

Accounts should therefore be kept regularly, two books being required for the purpose,

although sometimes three are provided, viz. (a) the day book, (b) the weekly book, and (c) the quarterly book.

THE DAY BOOK. Every penny spent during each day should be recorded in this book, with full details of the purchases.

THE WEEKLY BOOK will be provided with columns headed baker, grocer, dairy, butcher, etc., and every week the amounts paid to the various tradesmen should be totalled and put in one sum beneath the heading allotted to each.

THE QUARTERLY BOOK This is a book in which the amount of each week's expenses is entered, and the total ascertained once every three months.

Young children should be trained in the management of money and in business-like habits generally. It is a good plan to allow every child of eleven years and upwards a small monthly sum, a proper account of which should be kept. The money should not be given for purposes of self-indulgence alone, but definite necessaries should be purchased with it, such as hair ribbons, small school accessories, and birthday and Christmas presents for friends. A weekly allowance to children is not so beneficial in training them to exercise forethought, and there is danger of the hand-to-mouth habit being developed.

The following are specimen pages from a daily book of expenditure, the weekly book containing receipts and cash payments, and the quarterly analysis book:

Specimen page of Day Book. Wages and rent are not included. Household of four and one servant. Weekly accounts with dairy, butcher, grocer, baker and fishmonger.

				0	4	81					0	13	6
Paper				0	0	0 1	Paper	- 4			o	0	1
Tacks				0	0	11	Cabbage				ŏ	0	3
THURSDAY			i				Horseradish				ő	0	14
Paper	• • •			0	0	0 1	Turnips				ñ	0	5
Lamp chimne	y			0	0	2	Plums			• • • •	0	0	6
Wednesday			,			1	Flowers	••		• • • • • •	0	'I	6
House flannel	• • •	• • • •		0	0	71	Laundry Potatoes		• • • •	• • • •	0	3	6
Carrots	• • •			0	0	3,				1		١.	
Stamps			•••	0	0	3	SATURDAY			i			•
Bus fares				0	0	9	Paper	•••		• • • •	0	0	4
Paper				0	0	O l	Hearthstone	• • • •	• • •		0	0	1
TUESDAY			- 1				Six bananas	• • • •	• • •		0	0	6
Apples (2lbs)	• • •	•••		0	0	6	Salad	• • •	•••	•••	0	0	6
Cauliflower	• • •	•••		0	0	4	FRIDAY						
Mending dish (rivete	ed)	•••	0	0	8	-			1			-
Paper	•••			0	0	0	Parsley				0	0	O ł
Blacklead	•••			0	0	41	Candles				0	0	10
Soap				0	0	6	Beeswax				0	٥	3
MONDAY.			- 1			n	Brought forw	ard			0	4	8
August 3rd			- 1	£	s.	d.		_		- 1	£	S.	d.

Quarterly Account: £3 os. od. a week

		Grocer.			Baker.			Dairy	•	-	Butcher			Fishmonger			Greengrocer	,		Laundry.			Newspaper	
	,	Çs.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
August 8	0	14	3	o	3	2	0	4	3	0	12	5	0	4	0	0	5	41	0	3	4	0	0	3
August 15	0	12	7	0	3	6	0	4	3	0	13	2	0	2	9	0	6	0	0	3	0	0	0	3
August 22	0	15	4	0	3	2	0	4	0	o	11	3	0	5	6	0	4	7	0	2	9	0	0	3
August 29	0	14	8	0	3	0	0	4	3	0	12	0	0	3	4	0	5	2	0	3	6	0	0	3
September 5	0	13	9	0	3	4	0	5	0	0	12	4	0	2	91	0	4	2	0	3	0	0	0	3
September 12	1	2	7	0	3	0	0	4	3	0	11	0	0	I	8	0	4	0	0	2	9	0	0	3
September 19	0	16	6	0	3	6	0	4	3	0	14	0	0	5	0	0	5	0	0	3	0	0	0	3
September 26	0	12	5	0	3	0	0	4	0	0	13	4	0	3	5	0	3	71	0	2	11	0	0	3
October 3	0	15	2	0	3	4	0	5	0	0	12	0	0	4	3	0	5	31	0	3	0	0	0	3
October 10	0	19	7	0	3	0	0	3	9	0	14	0	0	2	31	0	4	6	0	3	2	0	0	3
October 17	0	11	8	0	3	2	0	4	3	0	16	3	0	3	4	0	5	2	0	3	0	0	0	3
October 24	0	17	2 1	0	3	0	0	4	0	0	12	5	0	4	2	o	?	6	0	2	9	0	0	3
October 31	0	15	6	0	3	6	0	4	3	0	15	0	0	3	0	0	5	0	0	2	11	0	0	3
£	10) I	21	2	1	8	2	15	6	8	9	2	2	5	6	3	1	4 1/2	I	19	1	0	3	3

Specimen pages of Weekly Book.

l	RECEIPTS	•	£	s.	d.		EXPENDIT	URE	1	5.	1	đ.
Aug. 1	Weekly Allowance	• • • •	3	0	0	A g 8	Grocer		o		1	
- 1							Baker		o		1	3 3 5 0
- 1						1 1	Dairy		o		1	3
1						11 1	Butcher		! c		1	5
l					1	i l	Fishmonger		; с			
. 1			1		1	1 1	Greengrocer		0			4 2
'				1	!		Laundry		0			4
,			1		1		Newsagent		(3
			1	1	1		Insurance (se		(3
			l	1			Chandler	•••) 1		9
	_		1	1	i		Sundries		; ¢		- 1	0
	•		1	1	1	1	Renewals	•••	···] •	.) .	- 1	10
			ĺ	1	1	1	Repairs) (8
•			1		1	1	Coal (put by	towards)	··· '		3	0
			1		ĺ	1	Light (put by	towards			2	۰.
						_	Balance	• •	[) :	3	5 1
	•		3	0	0	_				3 '	0	0
۰				_		-					_	
Aug.	To balance		0	3	5	ł!			1		- 1	
	Weekly All∩wance	•••	3	o	0	1	1		- 1	1	1	

or £39 os. od. a quarter.

			_																												
	Chandler	1			Sundries			Donomol	Trememon			Repairs		Same	towards	Coal	53	saved towards	Light		Servant's	nement memora		Weekly	Lotai		Weekly	Dataille		Total	
£	5.	d.	,	Ę	5.	d.	£	S	. •	1.	£	5.	d.	£	5.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	5.	đ.	£	s.	d.
0	1	9	-	0	1	0	0	o	1	0	0	0	8	0	3	0	0	2	0	0	0	3	2	16	61	0	3	5₺	3	0	0
0	2	0	ì	0	I	6		-	_			_		0	3	0	0	2	0	0	0	3	2	14	31	0	5	81	3	0	0
0	3	2	-	0	0	9	0	1		8		_		0	3	0	0	2	0	0	0	3	2	17	8	0	2	4	3	0	0
0	1	6	1	0	1	0		-	_		0	0	10	0	3	0	0	2	0	0	0	3	2	14	9	0	5	3	3	0	0
0	2	3		_	_		0	2		0		_		0	3	0	o	2	0	0	0	3	2	14	11	0	5	10}	3	0	0
0	2	0		0	0	8		_	_			_		0	3	0	0	2	0	0	0	3	2	17	5	0	2	7	3	0	0
0	2	3		0	1	0		-	_			_		0	3	0	0	2	0	0	0	3	3	0	0			-	3	0	0
0	3	٥			_	-	0	2		9		_		0	3	0	0	2	0	0	0	3	2	13	111	0	6	o≩	3	0	0
0	2	8	ł	0	2	0		-	_		0	0	7	o	3	0	0	2	0	0	0	3	2	18	10	0	I	2	3	0	0
0	1	8		0	0	6		-	_			_		0	3	٥	0	2	0	0	0	3	2	17	11	0	2	야	3	0	0
0	2	3			_	-	0	3		4		_		0	3	0	0	2	0	0	0	3	2	17	11	0	2	r	3	0	0
0	3	0		0	2	0		Ċ	_	•	0	٥	10	o	3	0	0	2	0	0	0	3	2	18	41	0	I	7₺	3	0	0
0	1	8		0	0	9	0	,		6		_		0	3	o	0	2	0	0	0	3	2	18	7	0	1	5	3	0	0
1	9	3		0	11	2	0	12	:	I	0	2	11	I	19	0	1	6	0	0	3	3	3	7 0	5	I	19	7	39	0	0

REASONS FOR KEEPING ACCOUNTS. One of the first good results obtained from the keeping of household accounts properly is that the mistress sees at a glance that the expenses are being kept within the bounds permitted by the income and that there is some provision made for a reserve fund.

The accounts serve as a check upon undue extravagance, and as a reference in cases of dispute as to payment of accounts. By means of the accounts, too, the mistress is enabled to compare prices of goods from time to time, and to ascertain how long the various purchases last without renewal.

The habit of keeping household accounts also encourages thrift.

EXPENDITURE of the income may be roughly classified under four headings:

- (a) CURRENT EXPENSES, or those which are incurred day by day, such as rent, rates, taxes, food, fuel, lighting, clothing, travelling, wages, household requisites, and where there are children, their education.
- (b) OCCASIONAL EXPENSES, such as purchase of furniture, linen, holidays, entertaining visitors, etc.
- (c) CONTINGENT EXPENSES, such as illness, accident or sudden change of residence.
- (d) RESERVE FUND. Effort should be made in time of health, by every one earning or managing money, to make some provision which

shall be available in times of sickness or stress. Much misery and privation could be avoided if a reserve fund of this description were the rule in every family. It is not advisable to wait until a large sum can be put aside towards this end; ever so small an amount, saved weekly, will soon mount into a considerable sum, which may then be invested either with a bank or elsewhere, the risk of burglary, and the temptation to spend the money being reasons against the habit of keeping it in the house.

HOUSEKEEPER'S ALLOWANCE. This should be fixed and paid weekly, monthly or quarterly, as convenience may demand. This is an allowance intended to meet all expenses for food, laundry and incidental requirements of the household other than the rent, taxes, dress, lighting, etc.

The amount to be calculated for each member of the family, for food only, including all servants, and regarding two children as one adult, in the ordinary middle-class family in England is usually from 9s. to 10s. 6d. per person weekly, if there are not less than five persons in the family. Besides provision for the food, a good margin should be allowed for cleaning materials, repairs, renewals, and other incidental expenses. Every housekeeper should endeavour to put aside a small fund for emergencies such as extra help required occasionally, unexpected guests, etc.

POINTS TO REMEMBER in keeping accounts: Enter all payments into the daily book every day distinctly and clearly, giving details regarding the dates and items.

Keep two files, one for the accounts as they come in, and one for the bills as they are paid.

Retain all receipts for large amounts or for things which are out of the ordinary routine, and see that all accounts paid are properly receipted.

RECEIPTS. Keep receipted accounts on a file and do not throw them away for seven years. After six years from the date of purchase, no payment of an account can be insisted upon legally (see Statute of Limitations), but an additional year is a safeguard against any mistake in the dates.

Receipts should only be accepted if they are quite clear, bearing the date in full; the amount in words as well as in figures, and the receiver's signature in full. For amounts over a value of £2 a penny stamp must be affixed to the receipt, and should be obliterated with the receiver's name.

It is well also, for further security, to see that the receipt states for what purpose the money is paid, and how paid (whether by cheque or by cash).

CASH versus CREDIT. THE SYSTEM OF

PAYING CASH or ready money, either at the time of purchase or within a week, is by far the most satisfactory manner of dealing with household accounts. From an economical point of view it is to be recommended, since it will generally secure the best goods at the most reasonable prices, and tradespeople will frequently allow a discount of as much as 5 per cent (1s. in the £) for cash settlements.

As a saving of trouble and time it is welcomed by housewives, who are able to check accounts more easily and to detect inaccuracies; expenditure may be the better regulated; a reserve fund may be more readily created, and the housekeeper is not confined to one source of supply for

any particular article.

THE CREDIT SYSTEM, although sometimes convenient, is a more expensive way of buying goods; checking the accounts over a long period is rendered difficult, and inaccuracies may pass unnoticed. It is almost impossible under a credit system to know how expenses are mounting up, and the creation of a reserve fund is consequently not an easy matter.

PAYMENTS BY CHEQUE. When filling in a cheque always use ink, and state the sum to be paid clearly in words as well as in figures, making sure that these agree, or the cheque will be returned by the bank to have the discrepancies made good.

Leave no space upon the line when expressing the amount of a cheque or the temptation to add figures and words may prove too much for dishonest persons—for instance, "seven" with a space after it, may be readily increased to "seventy."

A cheque must be made payable (on demand) either to the order of some person named or to "bearer," and the drawer should be perfectly certain that enough money is in the current account at the bank to meet it when presented.

The payee's right initials and name correctly spelled must appear upon the face of a cheque, and the drawer's signature must correspond with that inscribed in the banker's book.

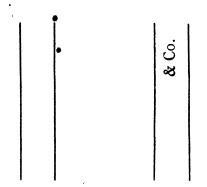
Alterations upon the face of a cheque must be initialed by the drawer or the cheque will not be honoured at the bank.

The date must be inserted in its proper place, and may be for any day, Sunday included; if deferred payment is required, cheques may be post dated.

Particulars of the cheque should be entered upon the counterfoil for the guidance of the drawer.

To guard against dishonesty cheques may be crossed, which will render their negotiation more difficult of accomplishment. A general crossing is made with two parallel lines across the face with or without the words "& Co." between them.

Example.



A general crossing necessitates the paying of the cheque through a bank; cash could not be obtained for it over the counter of the bank upon which it is drawn.

Special crossings are two parallel lines between which are written special instructions for the banker.

Example.

(a)	ck	(b)	a
	Joint Stock		John Smith
	ondon Jo		a/ Johr
t	Lor		

Example (a) indicates that the cheque can only be cashed through the bank named between the lines, and (b) that the cheque can only be

paid to the account of "J. Smith."

The words "not negotiable" in the crossing of a cheque ensure that if it be stolen the thief cannot give a good title to it even if he receives value from a person having no notice of the theft. Creditors are not obliged to accept cheques in payment of account; not being money, they are not considered as legal tender.

RECEIVING CHEQUES. Take note that they are properly drawn, and cash them as soon as possible. Bankers may refuse cheques which are six months old until the drawer's consent to pay them is obtained; also in the event of the death of a drawer before the cheque is cashed, the payee may be obliged to wait a considerable time for payment until the estate is wound up; or payment may in the meantime be countermanded by the drawer if a cheque be kept too long. It is unwise to accept cheques unless the drawer is known personally.

ENDORSING CHEQUES. Do not endorse a cheque until presenting it for payment. Loss of a cheque should immediately be notified to the drawer, who may then instruct his bankers to stop payment.

Endorsements appear at the back of a cheque, and care must be taken to adhere to the initials and name inscribed on the face. Should the

drawer make a mistake in the payee's name, the endorsement should agree, and the correct name may afterwards be placed below. The titles "Mr," "Mrs," "Miss," etc., must not be included in an endorsement.

INVESTMENTS. The Post Office Savings Bank is a Government Institution established by Act of Parliament, and is one of the safest methods of investing money.

Small sums of one shilling and upwards (excluding pence) are received at any Post Office in the United Kingdom. Up to £50 may be deposited in one year, and £200, including interest, is the naximum amount which may be

reached by any depositor.

Forms are issued from any Post Office in the United Kingdom to which penny stamps may be affixed for the assistance and convenience of children and others; instructions for use are to be found on the forms. Deposits may be made for children under the age of seven years, but money may not be drawn from their accounts until they reach that age. All money paid to a depositor's account is entered by the Post Office official in the book and stamped with the name of office and date of entry. The book must be passed on to the General Post Office once each year to be totalled and to be credited with interest allowed to the depositor.

The General Post Office issues money boxes, of which the keys are retained; when the box is full the depositor may take it to any office where

it will be opened and the amount credited in the depositor's book.

A small fee is charged for the loan of the box,

which is refunded when it is returned.

WITHDRAWALS. Sums of £1 may be withdrawn on demand at any Post Office, a specially prepared form and the book being required. Amounts of more than £1 must be applied for upon other forms supplied at the Post Office, which must be posted to the General Post Office, when a warrant entitling the depositor to receive the money will be returned. No charge for postage is made in connexion with deposits or withdrawals, providing the letters are posted within the United Kingdom. All matters connected with depositors' accounts are kept strictly secret in the Savings Bank Department, whose business it is to deal with them.

Interest at the rate of $2\frac{1}{2}$ per cent per annum is allowed on all money deposited with the Savings Bank Department.

GOVERNMENT STOCK. When the maximum amount in the Savings Bank is reached, the money so saved may be invested in Government Stock, upon an application to the Comptroller duly signed.

Investments of this kind may be made in 2½ per cent Consolidated Stock, 2½ per cent Annuities, 2¾ per cent Annuities (1905), Guaranteed Stock 2¾ per cent, Guaranteed Stock 3 per

cent, or Local Loans 3 per cent.

The depositor's account will be charged with the investment at the current price of the day upon which the stock is purchased, plus the commission, entries relating to the transaction being duly entered in the depositor's book. An equivalent amount of stock will be credited to the depositor in the Government Stock Register of the Post Office Savings Bank, and a certificate will be sent to him by post.

The annual limit for such investments is £200 stock, and the total amount standing to the depositor's credit at any one time must not exceed £500. A part or the whole of such stock may be sold upon a form of notification being sent to the Comptroller together with the deposi-

tor's book and certificate.

DIVIDENDS are credited to the account as soon as they become due, and a corresponding entry is made in the depositor's book at the annual auditing of same. Dividends fall due quarterly on the 5th of April, July, October, January, except in the case of guaranteed stock, when it is paid half-yearly on the 1st of January and July.

ANNUITIES may be purchased through the agency of the Post Office Savings Bank, or through any of the various insurance societies. Immediate or deferred annuities may be arranged for. In the former case a lump sum is paid (the amount varying according to the age and sex of the annuitant) and the payments start at once. In the latter case, a certain sum of

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money is paid yearly for a given number of years until the applicant has reached the age stipulated in the policy, at which time, the payments will cease and the annuity automatically begin.

INSURANCE. Every person should insure his life, particularly those who have families dependent upon them, and who have no other means of leaving provision for those remaining, when they die.

LIFE INSURANCE may be effected through the agency of the Government or through one of the many life insurance societies, the premium charged varying according to the age, sex and amount for which the life is insured: premiums are payable quarterly or annually. Policies are usually issued after payment of the first instalment of the premium.

The amount of insurance may be payable at death or at a given age. Insurances from £5 to £100 may be effected on the lives of persons between the ages of fourteen and sixty-five through the Post Office Savings Bank; children between the ages of eight and fourteen may be insured for £5 only.

SHARES IN COMPANIES. Shares issued by various companies may be either ordinary, preference or deferred shares.

Preference shares command a dividend which is always of the same percentage, but have a prior claim upon the profits for division; ordinary

shares will probably command a higher rate of interest, the amounts varying according to the success of the company in any financial year, but the risk is greater, since no division can be made for ordinary shares until the given rate of interest be paid upon the preference shares.

A stockbroker is employed to buy or sell shares for his client upon the Stock Exchange, and quotations of various shares are to be found in the daily papers. A close examination should be made of the last report and balance-sheet of a company before shares are bought, and some knowledge of the history of the company is also advisable.

LOANS. The Corporations of several cities in the United Kingdom will accept loans on mortgage for amounts f f100 and upwards in multiples of f10 at f3 10s. od. per cent per annum, and subject to six months' notice on either side at any time, or for a fixed term of three or five years, and thereafter subject to six months' notice at any time.

The mortgage deeds are prepared, stamped and issued by the Corporation in question free of cost to the investor; interest is payable halfyearly and commences from the date of payment.

The business is transacted by the City Treasurer of the city which is issuing the loan, and not through the Stock Exchange. Such loans are issued on the security of the rates.

PENNY BANKS. There are many Penny Banks

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in the United Kingdom. The smallest amount of money which may be deposited is one penny, and there is no restriction as to the amount which may be paid in.

Withdrawals up to fin can be made on demand, but for larger sums a notice must be given, the length of time warying according to the amount required.

The deposit and withdrawal must take place, at the branch where the account is opened. The money invested commands an interest of $2\frac{1}{2}$ per cent per annum.

BUILDING SOCIETIES. A house may be bought through the medium of building societies. The borrower, as a rule, must be able to contribute about 30 per cent of the purchase money, and the society will advance the remainder as a loan, in return for a mortgage deed upon the house, until such time as the amount of loan and interest shall have been repaid, by instalments or otherwise, when the house becomes the property of the purchaser.

BANKING. In order to open an account at a bank it is usual to have an introduction to the manager, and in most banks a minimum sum must be deposited before an account can be opened. The customer's usual signature must be inscribed in the signature book of the bank for purposes of future identification, and the account may be a current or a deposit account.

CURRENT ACCOUNTS. These are the ordinary

accounts from which money is drawn, and into which money is paid at will. No interest is paid by the bank upon current accounts, and if a minimum balance is fixed, as is usually the case, a charge is made should the amount fall below such balance.

• For current accounts three books are provided by the bank, (a) a cheque book, (b) a paying-in book, and (c) a pass book.

The cheque book varies in cost according to the number of stamped cheques contained therein (each cheque bears a penny stamp), and every cheque is perforated so that it may be easily torn from its place, the counterfoil remaining in the book for the insertion of duplicate particulars as to the amount, name, etc., upon the cheque.

PAYING-IN BOOKS contain particulars of all notes, gold, coin, and cheques or drafts, etc., which may be paid into the bank. A perforation appears down the middle of the page, the bank cashier stamping and initialing the receipt for cash on the one side and detaching, the other side containing duplicate entries for the use of bankers.

THE PASS BOOK contains entries of all moneys paid in and amounts of all withdrawals from the account. This book should be left frequently with the banker so that it may be duly posted up to date. All cheques which have been met by the account are returned to the depositor in this

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pass book, and should be retained by him for a reasonable period, being sometimes regarded as receipts.

DEPOSIT ACCOUNTS are those upon which interest is paid by the bankers at a rate of 1½ per cent below bank rate. For instance if bank rate is 3½ per cent the interest on deposit account will be 2 per cent. Bank rate is fixed by the Bank of England, and varies with the supply of and demand for gold on the market. A high rate of interest denotes a scarcity of money and a low rate indicates an influx of money into the market. Notice of seven days must be given to the bank if money from a deposit account is to be withdrawn. Upon payment of the first deposit, a "deposit receipt" is issued to the customer, but most bankers issue deposit books similar to those of the Post Office Savings Bank.

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